MEDICINE BOW NATIONAL FOREST THUNDER BASIN NATIONAL GRASSLAND LAND AND RESOURCE MANAGEMENT PLAN ANNUAL MONITORING AND EVALUATION REPORT

FISCAL YEAR 2002



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ANNUAL MONITORING EVALUATION REPORT FISCAL YEAR 2002

ABSTRACT



The Land and Resource Management Plan (Forest Plan) for the Medicine Bow National Forest and Thunder Basin National Grassland was approved on November 20, 1985, therefore, implementation and Monitoring of the Plan began during 1986. This seventeenth annual report evaluates the results of the monitoring activities that occurred on the Forest during Fiscal Year (FY) 2002, and makes a variety of recommendations to improve monitoring or project activities.

The two primary components of Monitoring are described in Chapter III and IV of the Forest Plan. Chapter III identifies the General Direction and the Standards and Guidelines that must be followed when implementing projects on the ground. The table at the beginning of Chapter III shows the projected resource outputs, costs, and benefits of implementing the Plan. Chapter IV displays the monitoring requirements for the various resources, and also the amount of Allowable Variance that the

outputs for each resource can deviate from the stated objectives.

Monitoring roles and responsibilities range from the Forest Supervisor who provides overall leadership and direction and makes Forest-wide decisions, to District Staff Specialists who implement the District schedule of projects on the ground. The Forest Interdisciplinary (ID) Team coordinates and guides the monitoring program and helps prepare the annual report for approval by the Forest Supervisor.

Forest users also have an opportunity to provide input to the Monitoring effort by reporting any unique experience or observation that they may have had while on the Forest. These reports are individually investigated and evaluated to determine whether any corrective action is necessary, and also to decide the timing and methods for implementing that action.

Forest Plans are dynamic and can be changed by means of Amendments or Revision (36 CFR 219.10(f)(g); 1982 Regulations). The intent of this flexibility is to maintain the Plan as current and accurate, in accordance with changing resource conditions and public demands.

In response to the five-year review during 1990, revision of the 1985 Medicine Bow and Thunder Basin Land and Resource Management Plan was initiated in January, 1992. During 1993, the Medicine Bow and the Routt National Forests were combined. Since the Routt Plan Revision was further along in the process, the emphasis was to complete that effort first, which was accomplished in 1998. Subsequently, the Medicine Bow Plan Revision effort (now discrete from the Thunder Basin's revision) was formally reinitiated during October, 1999. The Draft EIS was released on December 16, 2002 with the Final EIS scheduled for release during December, 2003. Refer to Section VI for a more complete discussion of this history.

In 1995 the Forest Service decided to pursue the revision of land use plans for ten National Grasslands and Forests that comprise the "Northern Great Plains Ecosystem" which includes the 553,300-acre Thunder Basin National Grassland. A single Environmental Impact Statement would be produced inclusive of all the administrative units in the Northern Great Plains area, and separate revised Forest Plans would be created for the three administrative units which contain all the involved Grasslands and Forests. A Notice of Intent to Prepare an Environmental Impact Statement was published in the Federal Register in February of 1997. A Draft Environmental Impact Statement (DEIS) and Proposed Revised Plans were published in July of 1999, and were subject to four public review periods, ending in February of 2000. A Final Environmental Impact Statement was published, and Record of Decision (ROD) signed, on July 31, 2002.

The signing of the ROD for the Thunder Basin National Grassland's revised plan served to formalize the separation of the Thunder Basin's land use planning from that of the Medicine Bow National Forest. The first full season of management under this revised Grassland Plan is 2003, hence, plan monitoring will be discrete from that for the Medicine Bow National Forest starting in 2003. *This* monitoring report, however, addresses conditions in 2002, and therefore reflects the still-combined planning status of the two administrative units.

A significant event during 2002 was the resolution of a lawsuit (No. 01-CV-078-B) that had been lodged against the Forest Service. It was filed on May 2, 2001. Two timber sales, the Joe's Park and Bird Creek Sales, were the focus of the suit. The lawsuit alleged violation of several laws in the failure to revise the Medicine Bow's 1985 Land and Resource Management Plan within fifteen years. In a District Court decision dated September 30, 2002, the Forest was allowed to operate under the 1985 Forest Plan until it was revised. The Court also ordered the Forest to complete a Revision of the Medicine Bow Paln by December 2003.

An important part of Monitoring and Evaluation is to determine if the resource outputs, costs, and returns predicted in the Forest Plan were achieved. As a result of Monitoring during 2002, it was determined that the majority of the projected average annual outputs/activities shown on Table III-1 of the Plan were accomplished. The Forest Plan Evaluation Table in Section VIII of this report compares the objectives stated in the Plan with what was actually accomplished during 2002. In addition, each Monitoring Item that exceeded the Allowable Variance, as stated in Chapter IV of the Forest Plan, is discussed in detail.

Another goal of Monitoring is to determine how well the management Standards and Guidelines and General Direction in Chapter III of the Forest Plan were met. Section IX of this report provides a discussion of the results of Monitoring each of the 50 Items listed in Chapter IV, and any recommendations for changing management techniques or implementation methods in the future.

Corrective actions identified by the ID Team as a result of monitoring during 2002 are discussed in Section X, Need to Improve Monitoring or Implementation. These changes will be addressed during Fiscal Year 2003.

Section XII, Review of Previous Year Recommendations, discusses the changes recommended by the ID Team in the 2001 report, and what was accomplished during the 2002 year of monitoring.

I. INTRODUCTION



The Record of Decision for the Forest Plan was signed by the Regional Forester on November 20, 1985. Subsequently, implementation of the Plan began during Fiscal Year 1986. The historic legislative background and evolution of National Forest System Planning is provided in the Preface to the Plan (pages i-x). The Plan and Final EIS were developed according to the 1982 version of the regulations at 36 CFR, Part 219.

One of the requirements of the Forest planning process is to monitor and evaluate how well the Plan is implemented. The process also includes making

subsequent modifications to the Plan in response to Monitoring and Evaluation. This report documents the results of monitoring during Fiscal Year 2002, discusses the evaluation of those results, and describes the rationale for any changes to the Plan that have been recommended. These changes may occur in the form of Amendments to the Plan, or be used to help improve the methods of implementing or monitoring projects on the ground. The regulations at 36 CFR, Part 219.12(k), require that implementation of projects on the ground be evaluated annually on a sample basis, as specified in the Forest Plan. These monitoring requirements are:

- ** A program of monitoring and evaluation shall be conducted that includes consideration of the effects of National Forest management on land, resources, and communities adjacent to or near the National Forest being planned and the effects upon National Forest management of activities on nearby lands managed by other Federal or other government agencies or under the jurisdiction of local governments (36 CFR 219.7(f)).
- ** To determine if conditions or demands in the area covered by the Forest Plan have changed significantly enough to require any revision to the Plan (36 CFR 219.10(g)).
- ** To determine if budgets have significantly changed the long-term relationships between levels of multiple-use goods and services enough to create the need for a "significant amendment" (36 CFR 219.10(e)).
- ** To determine how well the stated objectives of the Forest Plan have been met (36 CFR 219.12(k)).
- ** To determine how closely Management Standards and Guidelines in Chapter III of the Forest Plan have been followed (36 CFR 219.12(k)).

The Annual Monitoring and Evaluation Report for Fiscal Year 2002 meets the intent of the 1982 Regulations, and also satisfies the purpose of Chapter IV in the Forest Plan to provide information about the progress that is being made toward achieving the stated goals, objectives, and management requirements (page IV-1). It also provides an important and concise communication link with the public and with other levels within the Forest Service, in order to disclose the effectiveness of implementing the Forest Plan. In addition, it identifies any research efforts that may be needed to improve the Plan or the methods for implementing resource management activities on the ground.

II. MONITORING PROGRAM SUMMARY



Projects that implement the Forest Plan are annually monitored on a sample basis and evaluated to determine how well the goals and objectives were met, and how effectively the Management Standards and Guidelines helped to protect the Forest resources. It is important to note that monitoring actions are normally planned in areas where projects occur, in order to detect and mitigate any adverse impacts to the environment. In areas where no project activities are planned there usually is no need to monitor, except to acquire base-line data. Therefore, monitoring tends to reflect more issues than are actually occurring on the Forest as a whole. The Monitoring Program should be viewed as a method of determining how well the Forest Plan is being implemented, rather than a system that only identifies problems on the Forest.

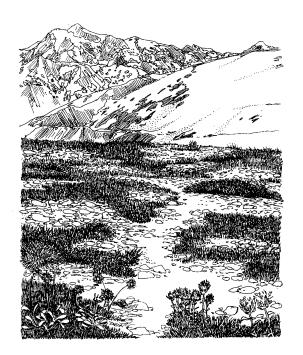
The Monitoring Program for the Forest is comprised of two components. The first component relates to the Monitoring Requirements in Chapter IV of the Forest Plan. The Forest ID Team compares the resource output objectives that were projected and displayed in Table III-1 (Time Period 2001-2010) of the Plan to what was actually accomplished during the current Fiscal Year. This output is then compared to the Maximum Allowable Variance for each item listed in Table IV-1 to ensure that the performance was within the specified limits. The Allowable Variance for each monitoring item was developed to indicate how much the measurement is allowed to deviate. Exceeding the Variance indicates that the objectives are not being met as projected, and that closer examination of the item is warranted. A table is included in Section VIII of this report to display the comparison for FY 2002.

It is important to recognize that Table III-1 displays "average annual" outputs for a decade, but does not require the stated amount to be achieved each year. Therefore, the most meaningful data is the total output for a ten-year period. Data gathered during the past seventeen years has been used by the ID Team to evaluate each Monitoring Item and formulate conclusions from the annual output and expenditure levels that have occurred. The ID Team will continue to monitor these items, evaluate the results, and recommend minor changes until the Forest Plan Revision is completed and approved.

The second component of Monitoring is performed on the ground. This phase of monitoring ensures that implementation of the Standards and Guidelines described in Chapter III is appropriate and effective. Forest resource specialists evaluated a variety of site-specific projects that were implemented during 2002. Individual specialist reports for the monitoring items are available upon request at the Forest Supervisor's Office in Laramie, Wyoming.

The Monitoring Program for implementing the Forest Plan includes activities such as field surveys, data collection, and assembling and evaluating resource information. The total cost to the Forest for Monitoring and Evaluation during Fiscal Year 2002 was estimated by the ID Team to be \$ 117,400. This is thirty-four percent higher than the cost that was reported for FY 2001.

III. MONITORING ROLES AND RESPONSIBILITIES



Forest Supervisor - The role of the Forest Supervisor is to provide leadership and direction, and to also make decisions delegated to the Forest Supervisor. The Supervisor is responsible for ensuring that the annual Monitoring Program is performed according to the requirements of Chapter IV of the Forest Plan, and in compliance with current regulations, laws, and Forest Service directives. In addition, the Forest Supervisor approves the Evaluation Report and certifies that the Forest Plan is sufficient to guide management activities for the succeeding year or identifies corrective actions necessary to keep the Plan current and valid.

<u>Forest Staff Directors</u> - The role of the Forest Staff Directors is to plan, develop, coordinate, and monitor Forest programs and activities for the Forest Supervisor. They also provide oversight to the staff specialists, for tasks such as compiling data and evaluating and

documenting the results of monitoring. The Directors also review the final monitoring report, and may recommend that changes be made to the Forest Plan or implementation procedures according to the results of the evaluation.

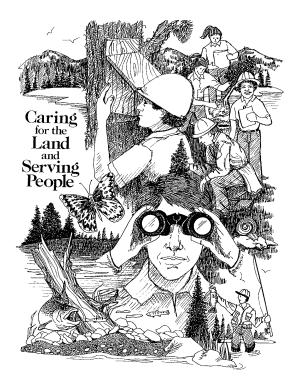
<u>District Rangers</u> - The role of the District Rangers is to provide leadership and direction, and to make decisions delegated to the District Ranger. District Rangers are responsible for project monitoring, which includes reviewing activities on the ground to ensure compliance with the requirements of the Plan. Each District Ranger is also responsible for maintaining the computer information database accurately and up-to-date, in order to meet the broad spectrum of data needs for the various resources.

<u>Forest Planning Staff</u> - The Forest Planning Staff facilitates the planning, monitoring, and evaluation processes and prepares the Annual Monitoring Evaluation Report. In addition, Planning personnel maintain the records for decisions made by the Forest Supervisor related to Monitoring, and processes any subsequent amendments to the Forest Plan.

<u>Supervisor's Office Staff Specialists</u> - The role of the Forest Resource Staff Specialists is to provide technical assistance and recommendations to the Forest Supervisor. Specialists may participate in ID Teams for the Forest Supervisor or assist the Staff Directors by providing information and management recommendations for forestwide projects. The Specialists may also work with District ID Teams to analyze site-specific projects and provide recommendations to the District Rangers.

<u>District Staff Specialists and Project Managers</u> - The role of the District Resource Staff Specialists and Project Managers is to plan, develop, coordinate, implement, and monitor District projects on the ground. The outputs that result from implementing various projects on the Ranger Districts are then added together to form the total accomplishment for each resource program on the Forest. The quality of project implementation and the quantity of the outputs are then compared to the goals, objectives, and Standards and Guidelines of the Forest Plan.

IV. MONITORING PROGRAM COSTS



The intent of monitoring the activities that implement the Forest Plan is to determine how well the stated objectives have been met, and evaluate the effectiveness of applying the Standards and Guidelines. Monitoring activities tend to focus on projects that affect major components of the environment, or are responsive to the issues, concerns, and opportunities that were identified during the planning process. The requirements for Monitoring and Evaluation are stated in the 1982 Federal regulations at 36 CFR 219.12(k). The three levels of monitoring are described below.

A. <u>Implementation Monitoring</u>: Determines if plans, prescriptions, projects, and activities are implemented as designed, and are in compliance with the objectives, Direction, and Standards and Guidelines of the Forest Plan. The results of this level of monitoring may indicate needed adjustments to the Forest Plan Direction, prescriptions, or predicted outputs, or may require changing future project plans or scheduling.

- B. <u>Effectiveness Monitoring</u>: Determines if plans, prescriptions, projects, or activities are effective in meeting the Management Area Direction, objectives, and the Standards and Guidelines in the Forest Plan. Evaluating the results of effectiveness monitoring may be used to adjust the objectives, predicted outputs, prescriptions, Standards and Guidelines, or mitigation measures stated in the Plan. This would be achieved by initiating a Revision or Amendment to the Forest Plan.
- C. <u>Validation Monitoring</u>: Determines whether the initial assumptions and coefficients used during development of the Forest Plan are correct. Evaluating this level of monitoring may indicate a need to Amend the Forest Plan, or a recommendation for additional scientific research. This may subsequently lead to recommending changes in laws, regulations, policies, or application models that affect the Forest Plan or project implementation.

Monitoring and evaluation is a specific activity that provides information to determine whether programs and projects are meeting Forest Plan direction. Monitoring requires collecting information on a sample basis from the sources stated in Chapter IV of the Forest Plan. Evaluating the results of monitoring helps to determine the effectiveness of the Forest Plan, which may generate the need to adjust the procedures for implementing projects, or to process an Amendment to the Plan.

Information for many of the Monitoring Items has historically been gathered and reported for individual resource programs, such as the Management Attainment Report (MAR). Therefore, information for items such as Timber Stand Improvement (TSI) and Grazing Use was already available for the monitoring report during the first year. When these items became a required part of the monitoring

program there was no additional cost to the Forest. Other items, however, were not previously monitored and when they became required by Chapter IV of the Forest Plan an additional demand on Forest personnel and funding was created. The Forest ID Team has estimated the cost that is directly related to Forest Plan Monitoring for each item described in Chapter IV during Fiscal Year 2002. These costs are grouped by resource and are shown in the following table:

FOREST MONITORING COSTS			
Resource Program - Fiscal Year 2002	Cost		
Recreation	17,750		
Visual Resource Quality	900		
Cultural Resources	7,000		
Biodiversity	800		
Wildlife	14,000		
Fisheries	13,000		
Range	50,400		
Timber	3,000		
Soils	3,000		
Water	3,500		
Transportation	1,000		
Fuel Treatment	800		
Forest Pest Management	850		
Lands	650		
Special Use Permits	750		
TOTAL MONITORING COST	\$ 117,400		

V. FOREST PLAN AMENDMENTS



The Regulations at 36 CFR 219.10(f) allow changes to be made to the Forest Plan; "The Forest Supervisor may amend the forest plan. Based on an analysis of the objectives, guidelines, and other contents of the forest plan, the Forest Supervisor shall determine whether a proposed amendment would result in a significant change in the plan. If the change is significant, the Forest Supervisor shall follow the same procedure as that required for development and approval of a forest plan. If the change is not significant, the Forest Supervisor may implement the amendment following

appropriate public notification and satisfactory completion of NEPA procedures."

Eighteen Amendments have been approved since November 20, 1985, when the Record of Decision was signed. The decision to revise the Forest Plan was made during 1991, and it was also determined that no more changes would be made to the Plan in the form of amendments unless they were considered to be necessary. Forest Plans, however, must be responsive to changing conditions of the land, resource uses, and the social and economic demands of the people (36 CFR 219.1(b)(14)). Subsequently, the last five amendments to the Plan were considered necessary and approved after 1991.

As stated in the regulations (36 CFR 219.10(f)), the Forest Supervisor may amend the Forest Plan if needed, but a determination must be made whether the amendment is a "significant change in the plan." In addition, the amendment cannot be implemented until after appropriate public notification and satisfactory completion of the NEPA procedures. The 1985 Forest Plan will continue to be implemented until completion of the revision, including; "at least 30 days after publication of the notice of availability of the final environmental impact statement in the Federal Register (36 CFR 219.10(c)(1))."

No specific Amendments to the Forest Plan were processed or recommended by the ID Team as a result of monitoring during FY 2002.

VI. SIGNIFICANT CHANGES IN RESOURCES OR PUBLIC ISSUES AND DEMANDS



A Forest Plan is normally revised every ten to fifteen years. (See page iii, paragraph 3, for a description of a legal contest involving this item.) It may also be revised whenever the Forest Supervisor determines that conditions or demands in the area covered by the Plan have changed significantly, or when changes in RPA policies, goals, or objectives would have a significant effect on the output levels of Forest resource programs. During the Monitoring and Evaluation process, the Interdisciplinary Team may recommend a Revision of the Forest Plan at any time (36 CFR 219.10(g)).

The timber volume sold during Fiscal Year 2002 continues to be lower than the amount that was predicted in the Forest Plan. This is one of the key

issues that will be addressed during the Forest Plan Revision. No changes to the Plan are recommended as a direct result of Monitoring during FY 2002.

Several natural resource issues loomed large both nationally and on the Medicine Bow National Forest in 2002. These included the issues of roadless area allocation and management, travel management (especially the allocation of motorized verses non-motorized travel opportunities), the viability of wildlife species, questions concerning the suitability of land for timber harvest, and all issues related to fire and fuels management. An immerging issue on the Thunder Basin National Grassland is the effectiveness of Federal environmental analysis as it is applied to energy development, especially the booming area of coalbed methane extraction.

The Forest ID Team is responsible for Monitoring the 50 Items listed in Chapter IV of the Forest Plan on an annual basis. The results of Monitoring these Items during 2002, including any recommendations for change, are discussed in Section IX,(5) of this report. Section X includes a list of recommendations made by the ID Team for making changes to the Monitoring Program or to project implementation procedures. Some of the changes may be accomplished with a minor Amendment to the Forest Plan, while others may require a "Significant Amendment (36 CFR 219.10(f))." Section XI identifies any specific changes to the Forest Plan that have been recommended by the ID Team. These changes will be made following approval of this report, and in compliance with all the NFMA and NEPA procedures. In addition, Section XII provides a review of the recommendations that were made by the ID Team in the Evaluation Report (Section X) for Fiscal Year 2001, and what was accomplished during 2002.

The Interdisciplinary Team provided the data for the Annual Monitoring Evaluation Report for Fiscal Year 2002, which has been reviewed by the Planning Staff and the Forest Supervisor. It has been determined that no changes related to individual resources or public issues or demands have occurred that would immediately require a Significant Amendment of the Forest Plan. The major issues that have been identified will be analyzed and addressed during the Forest Plan Revision process, which is described in the Regulations at 36 CFR, Part 219 (1982).

DECISION TO REVISE/AMEND THE FOREST PLAN:

The Forest Plan for the Medicine Bow NF and Thunder Basin National Grassland was developed to comply with the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA), as amended by the National Forest Management Act of 1976. The process that was used to develop the Forest Plan was in compliance with the implementing regulations of the National Environmental Policy Act of 1969. In 2002 the Thunder Basin National Grassland came under a newly revised Plan of its own, and the Medicine Bow National Forest's Plan was well along to being revised with a target date of December, 2003.

During 2002 the Thunder Basin National Grassland's Forest Plan was formally revised, following many years of public involvement and environmental analysis efforts applied to the "Northern Great Plains" area. This includes ten discrete Grasslands and Forests administered by the Dakota Prairie National Grassland, the Nebraska National Forest, and the Thunder Basin National Grassland. This omnibus approach to land use planning engendered the creation of a single Environmental Impact Statement for all the geographically related units, followed by the creation of discrete Forest Plans for each of the three administrative units.

A Notice of Intent (NOI) to prepare the Environmental Impact Statement was published in the Federal Register in February of 1997. A Draft Environmental Impact Statement (DEIS) and Proposed Revised Plans were published in July of 1999 and were subject to four public review periods, ending in February of 2000. A Final Environmental Impact Statement (FEIS) was published, and a Record of Decision (ROD) for each of the units were signed on July 31, 2002. With this signing by the Regional Forester, planning and monitoring for the Thunder Basin National Grassland will henceforward be discrete from that for the Medicine Bow National Forest. However, during most of 2002 the two units were still jointly adminstered under the prior 1985 Forest Plan. For this reason, both units will be the subject of the monitoring documented herein.

During October, 1999, the Medicine Bow NF officially initiated the Plan Revision process by publishing a Notice of Intent (NOI) to Revise in the Federal Register. A total of 900 letters containing 4,000 comments were received in response to issuing the NOI and facilitating six public meetings. Comments were also received after public review of the draft Management Area Prescriptions, Standards and Guidelines, and the Purpose and Need Statement. The planning team used these comments to define major revision issues and develop a range of alternatives to address those issues.

The Medicine Bow National Forest planning effort has been focused on gathering information about existing conditions and completing a variety of resource related assessments. Public meetings were conducted in various locations throughout the planning area during the fall of 2001. The Draft EIS and Forest Plan were released on December 16, 2002, and were available for formal public comment for 90 days after the publishing of the Notice of Availability (NOA) in the Federal Register on January 3, 2003. The Final EIS (FEIS) and Revised Forest Plan will be released in December of 2003. The public is invited to keep current on the Forest planning effort by accessing the World Wide Web at: www.fs.fed.us/r2/mbr, and then click on "Forest Planning."

VII. SPECIAL ACTIVITY MONITORING



Some activities or programs receive special attention due to their important value for managing the resources, and the resulting impact on Forest personnel and funding. The Forest is currently involved in two such programs that are described below:

LYNX AMENDMENT:

The Southern Rockies Lynx Amendment is a proposal to add direction to conserve lynx and their habitat on six national forests in Colorado and the Medicine Bow National Forest. During 2002 this effort was a "work in progress." This

endeavor consists of a comprehensive scientific investigation, which is being conducted by State, Federal, and academic experts. The Forest Service published a Notice of Intent (NOI) to prepare an EIS for analyzing the Management Direction in Chapter III of Forest Plans in the Region to determine if any of that direction may adversely affect lynx or their habitat. The analysis will examine and document the results of making potential changes to a variety of Management Directions and Standards and Guidelines, and the predicted effect on National Forest activities. The DEIS is planned for release during January, 2003 followed by a 90-day comment period. The Final EIS is expected to be completed and released in 2004. The Medicine Bow Plan Revision process, which will be finalized prior to the completion of the Lynx Amendment, has endeavored to be responsive to the ongoing lynx analysis by including lynx conservation direction consistent with the Lynx Conservation Assessment Strategy in all action alternatives within the planning effort.

SPECIES CONSERVATION PROJECT:

Part of the Forest Service mission is to manage for the diversity and viability of plant and animal species on National Forest System lands. The best available information needs to be acquired and used for resource management planning and decision-making. Therefore, the Forest continues to be involved with the Rocky Mountain Regional effort called the Species Conservation Project. The intent of this project is to compile and document information about terrestrial and aquatic ecosystems, including the associated plant and animal species, which will result in updating the Regional Sensitive Species list. Once completed, this information will be used to develop scientifically sound and efficient methods for managing the public lands. During 2002 ecosystem and species assessments were being prepared for this effort by independent scientists that are under cooperative agreements or contracts with the Forest Service. The first of these reports became available in the Fall of 2003. They may be accessed on the Internet at http://www.fs.fed.us/r2/scp/species assessment reports.shtml

VIII. COMPARISON OF ANNUAL PROJECTED/ACTUAL OUTPUTS AND EXPENDITURES



The information presented in this section helps evaluate whether the annual outputs are meeting the levels that were predicted in the Plan, or whether a change is needed. Depending on the extent of the departure from the predicted level, an amendment to the Plan may be necessary or the topic may be addressed during the revision process.

The objectives for the Projected Average Annual Outputs displayed on the following pages are from the Forest Plan, Chapter III, Table III-1 (pages III-7 to III-11). The following table compares the predicted annual outputs for each resource during the years 2001 to 2010 to the amount that was actually produced during Fiscal Year 2002.

	FOREST PLAN EVALUATION TABLE				
Resource Activity	Unit of Measure (M = Thousand) (MM = Million)	2001 - 2010 Projected Average Annual Output	Fiscal Year 2002 Actual Output Accomplished	Percent Projected Output	
RECREATIO	ON				
Public Developed	MRVD (1)	195	116	59	
Downhill Skiing	MRVD	28	21.3	76	
Dispersed (includes off- road motorized)	MRVD	729	836	115	
Off-road Motorized	MRVD	132	121	92	
Semi-Primitive Non-motorized	M Acres	178	219	120	
Semi-Primitive Motorized	M Acres	214	269	126	
Roaded Natural	M Acres	1,202	1,142	95	
Rural	M Acres	65	36	55	
Urban	M Acres	7	0	0	
Trail Const/Reconst	Miles	2.7	10.6	393	

FOREST PLAN EVALUATION TABLE				
Resource	Unit of Measure	2001 - 2010	Fiscal Year 2002	Percent
Activity	(M = Thousand)	Projected Average	Actual Output	Projected
	(MM = Million)	Annual Output	Accomplished	Output
WILDERNES				
Area Managed	M Acres	79	79	100
Wilderness Use	MRVD	13.0	13.6	105
WILDLIFE &	k FISH			
Winter Range	M Elk	4.1	4	98
Carrying	M Deer	22.0	34	155
Capacity				
Structures	Number	46	18	39
Big Game	MRVD	35.5	40	113
Hunting (2)				
Small Game	MRVD	43.0	20	47
Hunting (2)			0	100
Fishing (2)	MRVD	85.4	87.5	102
Nongame Use (2)	MRVD	5.5	5.5	100
RANGE				
Grazing Use	MAUM (3)	255	189.1	74
TIMBER (Co	ommercial Sale Offer	ings)		
Sawtimber (4	<u></u>			
(Chargeable Vol.	MMBF	29.3	2.5	9
to ASQ (5)	MMCF	6.14	0.52	9
Roundwood	.	,		
(Nonchargeable	MMBF	5.0	1.8	36
Vol. to ASQ)	MMCF	1.0	0.36	36
Reforestation		1 427	5.61	20
Natural	Acres	1,437	561	39
Planting	Acres	72	83	115
Seeding Timber Stand	Acres	N/A	90 894	N/A
Timber Stand	Acres	2,039	894	44
Improvement Firewood (Pers	Cords	22.400	2 216	10
Firewood (Pers and Commercial)	Corus	22,400	2,316	10
and Commercial)				
WATED (6)				
WATER (6) Water Yield	A a/E+	Dagalina	140	NT/A
	Ac/Ft	Baseline	140	N/A
Increase Water Meeting	Water Violations	0	1	N/A
Quality Goals (7)	water violations	"	1	IN/A
Quality Goals (1)				

	FOREST PLA	AN EVALUATION T	ABLE	
Resource Activity	Unit of Measure (M = Thousand) (MM = Million)	2001 - 2010 Projected Average Annual Output	Fiscal Year 2002 Actual Output Accomplished	Percent Projected Output
MINERALS				
Review Plans	Op. Plans	790	460	58
	COMMUNITY	I		
Senior Employ.	Enrollee Yrs	25	4.75	19
Program YCC Program	Enrollee Yrs	7	0	0
1 CC Flogram	Emonee 118	/	0	0
LANDS				
Purchase/	Acres	0	0	0
Acquisition			-	-
Exchange	Acres	160	8	0
R-O-W	Cases	25	1	4
Acquisition	2.67			
Landline Location	Miles	25	15	60
Location				
SOILS				
Resource	Acres	195	6	3
Improvement	710105	175	O	3
FACILITIES				
Construction for	Miles	1.0	0	0
General Use				
Reconstruction	Miles	57.3	0	0
for General Use	N. 6.1	20.0	0	0
Construction for Timber Sales	Miles	28.9	0	0
Reconstruction	Miles	22.7	0	0
for Timber Sales	Willes	22.1	O .	U
Construction for	Miles	40.0	2.1	5.3
Minerals				
Roads Closed	Miles	52.1	18.2	35
PROTECTIO				_
Fuel Treatment	Acres	1,437	84	6
(8)				
40				

FOREST PLAN EVALUATION TABLE				
Resource Activity	Unit of Measure (M = Thousand) (MM = Million)	2001 - 2010 Projected Average Annual Output	Fiscal Year 2002 Actual Output Accomplished	Percent Projected Output
EXPENDITURES (9)				
Total Budget	M Dollars	28,732	20,533	71
Med Bow Budget	M Dollars	18,699	11,490	61
RETURNS TO TREASURY				
Other Than	M Dollars	2,133	630	30
Minerals				
Minerals (10)	M Dollars	16,100	2,871	18

NOTE: NR = Not Reported

- (1) Thousand Recreation Visitor Days = A recreation visitor day is equal to 12 hours of recreation for one person, or one hour of recreation for 12 persons, or any combination of use.
- (2) The amount of wildlife and fishing use is included in the Dispersed Recreation category.
- (3) MAUM = Thousand Animal Unit Months = An AUM is the amount of forage consumed by one mature cow or equivalent in a one-month period.
- (4) Sale volumes are expressed in both cubic and board feet. The Average Annual Output may not be met during any single year, but must not exceed 293.0 MMBF for the 10-year period (2001-2010).
- (5) This accomplishment only includes timber volume that was actually sold.
- (6) The total amount of water yield from the Forest is estimated at approximately 1.026 MM Ac.Ft. (Baseline), depending upon annual weather conditions (Forest Plan, page III-8). The amount of water produced above that baseline level is calculated by the HYSED model according to the amount of vegetation treatment and road construction that occurred on the Forest during the year.
- (7) Reflects a water quality violation in the North Branch of Crow Creek (See Monitoring Item 36 Water Quality)
- (8) The fuels treated are only those created by forest management activities. (BD)
- (9) All expenditures and returns are in current year dollars.
- (10) Current accounting procedures make it very difficult to report actual returns from minerals, because several agencies are involved in the process of recording receipts from different mineral estates. Therefore, the figure shown for Fiscal Year 2002 is only an estimate. Note that this figure includes direct collections made for minerals royalties which go directly to the Federal Treasury.

IX. FOREST PLAN EVALUATION



The results of the FY 2002 monitoring and evaluation program have been analyzed by the Interdisciplinary Team, in order to determine the significance and the need for adjustment. Recommendations by the ID Team have been reviewed by the Forest Supervisor. This evaluation report includes a review and discussion of the questions stated in the regulations (36 CFR, PART 219).

A. To determine the effects of National Forest management on land, resources, and communities adjacent to or near the National Forest being planned and the effects upon National Forest management of activities on nearby lands managed by other Federal or other government agencies or under the jurisdiction of local government (36 CFR 219.7(f)).

This requirement is not specifically identified in Chapter IV of the Forest Plan, but it is addressed during the Environmental Analysis process for projects that are implemented as part of the Plan. The National Environmental Policy Act (NEPA) requires, "initiate and utilize ecological information in the planning and development of resource-oriented projects (Section 102(H))." The implementing Regulation at 40 CFR 1500.1(c) states, "The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." Part of this process is to "Identify environmental effects and values in adequate detail so they can be compared to economic and technical analyses (1501.2(b))."

The environmental effects include, "ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative (1508.8(b))." A cumulative impact is, "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (1508.7)."

The direction stated above is performed during the Environmental Analysis process prior to implementing any project on the Forest. The resulting analysis is then documented in an Environmental Assessment (EA) or Environmental Impact Statement (EIS). Reviews of these documents during 2002 indicated that all of them complied with the requirements of the NEPA, including the disclosure of cumulative effects. An evaluation of the discussions of cumulative effects in these documents also revealed that there were no direct effects on adjacent lands, resources, or communities that resulted from any of the specific project proposals. In addition, these document reviews determined that there were no identifiable effects upon National Forest management due to activities on adjacent lands.

In contrast, resource management on the Forest as a whole has had some impact on the social and economic conditions of several local communities. Two resource programs have had the most notable effect on adjacent communities. Recreation use of the Forest has increased during the past seventeen years, which translates into additional economic benefits being realized by some adjacent communities.

Although the amounts of these benefits have not yet been determined, the economic and social aspects of this trend will be analyzed and documented during the Forest Plan Revision process.

The second factor is the decline in the Timber Sale Program on the Forest since 1989. The Forest Plan predicted a total of 430.5 MMBF to be sold during the period 1986 to 2000, but only 191.4 MMBF were actually sold, which is about 44 percent of the amount predicted. The social/economic impacts to local communities due to these factors and other resource management activities on the Forest are among the major topics that will be analyzed and discussed in the Forest Plan Revision.

B. To determine if conditions or demands in the area covered by the Forest Plan have changed significantly enough to require revision (36 CFR 219.10(g)).

The Forest Interdisciplinary (ID) Team has evaluated the results of the Monitoring activities that occurred during Fiscal Year 2002. The Team concluded that conditions, public issues, or demands have not changed on the Forest since the Notice of Intent to revise the Forest Plan was issued during October, 1999. Therefore, the ID Team has decided not to recommend changing the revision schedule, which is due for completion during late 2003.

C. To determine if budgets have significantly changed the long-term relationships between levels of multiple-use goods and services enough to necessitate a significant Amendment to the Forest Plan (36 CFR 219.10 (e)).

The projected average annual budget displayed in the Medicine Bow Forest Plan (Table III-1, page III-10) for the period 2001 to 2010 is \$ 18,699,000. Historically, the actual budget allocated to the Forest has been about one-half the predicted amount, as shown in previous Monitoring Reports.

The total estimated budget was derived from the Forest Plans (Medicine Bow Forest Plan, page III-10), and then compared with the final budget that was allocated to the Forest during Fiscal Year 2002. The table below displays the predicted annual budget for the Forests, and the actual amount of funding that was allocated during 2002:

FISCAL YEAR 2002 BUDGET FOR THE MEDICINE BOW NATIONAL FOREST & THUNDER BASIN NATIONAL GRASSLAND:

Forest Budget	Projected Annual Budget (M \$)	Actual Annual Budget (M \$)	Percent of Projected
Medicine Bow	18,699	11,490	61

Although the actual budget for some resource programs was less than what was predicted in the Forest Plan, the actual outputs may have been achieved or exceeded during 2002. While reduced funding is not the only factor that determines whether the resource outputs are achieved for some of the Programs, it is often the primary reason. In contrast, some programs may be fully funded, yet do not achieve one or more of the predicted output objectives.

A variety of reasons may cause this situation, depending upon the resource output. Due to reduced funding levels and other contributory factors, the output objectives were not achieved as predicted in the Forest Plan for the following individual items: Wildlife and Fish Habitat Improvement, Grazing Use, Allowable Sale Quantity, Timber Stand Improvement, Soil and Water Resource Improvement, Forest

Road Development, Trail Construction and Reconstruction, Fuel Treatment, Land Exchange, and Right-of-Way Acquisition (Refer to Forest Plan Evaluation Table in Section VIII of this report).

The budget for the Medicine Bow National Forest was 61 percent of the desired level. Partnership projects with other public agencies or with private organizations often help to achieve Forest Plan objectives that otherwise might not be met. The Forest Leadership Team has determined that the reduced funding for the programs has not, "significantly altered the long-term relationship between levels of multiple-use goods and services projected under planned budget proposals, as compared to those projected under actual appropriations (36 CFR 219.10(e))." Therefore, no specific changes to the Forest Plan are needed at this time.

D. To determine how well objectives have been met (36 CFR 219.12(k)).

The Forest Plan provides long-range direction for managing the Forest by establishing program goals and objectives. Goals describe a desired future condition expressed in general terms, while objectives are responsive to the goals and are measurable in time and quantity. The goals of the Forest Plan are described on pages III-3 to 5 of the Plan, while the objectives are listed on pages III-6 to 11.

The goal of vegetation management is to sustain an environment that supports the uses that are emphasized and compatible within each Management Area Prescription. Vegetation treatment is a tool for achieving and maintaining a healthy and ecologically diverse forest for a variety of resource uses. The condition of vegetation on the Forest influences nearly all other resources and uses including; visual quality of the landscape, recreation opportunities, habitat diversity, insect and disease susceptibility, availability of wood products, water quantity and quality, amount and quality of forage for livestock and wildlife, and providing critical habitat for wildlife including Threatened and Endangered Species.

The amount and type of vegetation treatment that was accomplished during Fiscal Year 2002 included; 561 acres of reforestation using natural regeneration, 125 acres of timber harvest by clearcutting, 92 acres of timber harvest by partial cutting, and 894 acres of Timber Stand Improvement. The table below displays this information for FY 2002. The numbers shown in the Annual Forest Plan Objective column for FY 2001-2010 were derived from Table II-5, pages II-78 to 80 in the Final EIS of the Plan.

TREATMENT (1) METHODS	ANNUAL FOREST PLAN OBJECTIVE FY 2001-2010	ACTUAL FY 2002 ACCOMPLISHMENT
Sagebrush Conversion	193	0
Aspen Regeneration	400	0
Conifer Remove from Aspen	350	0
Reforestation - Natural	1,437	561
Reforestation - Planting	72	83
Reforestation - Seeding	N/A	90
Harvest by Clearcut	1,437	125
Harvest by Partial Cutting	1,866	92
Timber Stand Improvement	2,039	894

⁽¹⁾ Some treatments were contracted during 2002, but may not occur until some time in the future.

Many of the objectives shown on Table III-1, Chapter III (page III-6 to 11) of the Forest Plan were met, while some were exceeded and others were less than predicted. The Forest Plan Evaluation Table in Section VIII of this report compares the Projected Average Annual Outputs with the Actual Outputs that were accomplished during 2002, and the percent difference between the two numbers. Chapter IV of the Forest Plan displays the Allowable Variance, or how much the outputs are allowed to deviate from the stated objectives. Some of the Projected Outputs shown in the Plan are an average for a ten-year period (2001 - 2010). Therefore, a significant variance may occur in any single year, yet meet or exceed the total predicted output for the ten-year period, such as for Land Exchange.

After seventeen years of implementing the Forest Plan, most of the resource outputs now exhibit an identifiable trend of accomplishment. This information has helped to determine some of the issues that will be addressed during the Forest Plan Revision process. It will also identify any changes that may need to be made to the Forest Plan in the form of an Amendment prior to completion of the Revision.

The following discussions describe the primary factors that caused the Allowable Variance for each Monitoring Item to be exceeded during 2002, and the course of action for any recommended changes.

Monitoring Item 21: Wildlife and Fish Habitat Improvement

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Allowable Variance = +/- 10 %
Actual Variance = - 61 %
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Since 1994 funding in support of wildlife and fish habitat improvement has been insufficient to support an active structural improvement program. (It should be noted, however, that fifteen of the 17 accomplished improvements in 2002 were bear-proof containers at campsites which cost about \$1,000 each.)

Recommendation: This accomplishment shortfall is a function of national and regional budget priorities. Changes to the Forest Plan are not recommended at this time.

Monitoring Item 27: Grazing Use

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Allowable Variance = +/- 10 %
Actual Variance = - 26 %
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The amount of grazing use on the Forest continues to show a declining trend during the past several years. This is primarily due to continuing persistant and serious drought conditions across the State. This has resulted in operators putting their livestock out to pasture late, taking them off early, while some reduced the size of their herds or even opted for non-use of their permit.

Recommendation: The amount of grazing use is dependent upon a number of highly variable factors that are related to implementation, rather than the Plan itself. Therefore, no changes to the Forest Plan are recommended at this time.

Monitoring Item 30: Allowable Sale Quantity (ASQ)

Allowable Variance = The amount of timber volume sold cannot exceed; or must not deviate more than 5 percent under 293.0 MMBF for the 10-year period 1996-2005 (Forest Plan, page IV-46). Actual Annual Variance = - 91 %

The amount of timber sold during Fiscal Year 2002 was 2.5 MMBF, which did not meet the Annual Allowable Sale Quantity stated in the Forest Plan. The reason for not achieving the desired output is due to a combination of factors: the outcome of Administrative Appeals of some decisions (Holroyd Timber Sale, Tie Camp/Dinner Park Timber Sale, and others); litigation that delayed implementation of some decisions (Joes Park, Jack Creek III, and Bird Creek Timber Sales); project designs that had a lower volume output than what was predicted when planning the sale, and on-the-ground sale layout modifications resulting in less volume in the Timber Sale Contract than the amount determined by the Environmental Analysis process.

Recommendation: The goal for this item is that the total amount of timber sold must be within the Allowable Variance for the ten-year period. The variance for a single year, however, may vary considerably because the amount of timber that is sold can be adjusted during successive years. The total volume deficit for the first 10-year period was 117.91 MMBF, or 58 percent less than the objective that was predicted in the Forest Plan. The second ten-year period began during 1996, and as shown in the Forest Plan (page III-8), the Allowable Sale Quantity increased from 28.4 to 29.3 MMBF per year. Subsequently, the total amount of chargeable timber sold during the period 1996 to 2002 is 27 MMBF, or 91 percent less than what was predicted in the Plan. This reflects significant challenges in Plan implementation, not the Forest Plan itself.

Monitoring Item 32: Timber Stand Improvement

Allowable Variance = +/- 25 % Actual Variance = - 56 %

The Forest goal for Timber Stand Improvement (TSI) during 2002 was 2,039 acres. A total of 894 acres were treated, which is 44 percent of the amount predicted in the Forest Plan. The Allowable Variance was exceeded by 29 percent, which is a slight increase from the previous year. The main reason for the reduced output of TSI accomplishment relates to direction to protect potential lynx habitat. Thinning dense stands, especially in the lodgepole pine component, is strongly discouraged under present lynx habitat guidelines. Forest silviculturalists estimate that approximately 80 percent of potential TSI projects on the Forest have been impacted as a result.

Recommendation: Timber Stand Improvement includes thinning lodgepole pine stands before they reach age 30, in order to achieve stocking control and promote higher growth rates. Lodgepole pine often regenerates in extremely dense stands after clearcutting or fire, which require thinning to prevent a severe reduction in growth rates. The annual amount of TSI performed on the Forest was an important factor that was used to help determine the Long-Term Sustained-Yield Capacity (LTSYC) when the Forest Plan was developed. More emphasis needs to be placed on accomplishing TSI work on the Forest, or it will affect the amount of timber available in the future.

The SILVA 99 Report for 2002 showed that approximately 6,000 acres of overstocked lodgepole pine stands on the Forest need TSI treatment, which is a slight reduction from the previous year. Under the premise of the original Forest Plan, planning and budgeting for Timber Stand Improvement should be made a high priority, in order to achieve the output objectives stated in the Plan. The reduced budget for timber related activities during recent years, however, has directly impacted the program of TSI treatments on the Forest. This problem is related to implementation rather than the Forest Plan, therefore, no change to the Plan is currently needed.

Monitoring Item 40: Soil and Water Resource Improvements

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Allowable Variance = +/- 10 %
Actual Variance = - 97 %
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The Forest Plan objective for this item is 195 acres per year, but only 6 acres were accomplished during 2002. The Forest completed fewer soil and water resource improvement projects beginning in Fiscal Year 1998, because the Regional Office changed the method of allocating funds to the Forests. The result on the Forest has been a substantial reduction in funding compared to what was previously received. Subsequently, the number of projects and acres are expected to be less than predicted.

Recommendation: If the reduced level of funding continues to affect the outputs for this item, a change to the Forest Plan may be necessary. No change is needed at the present time, however.

Monitoring Item 41: Forest Road Development

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Allowable Variance = +/- 25 %
Actual Variance = - 95 to - 100 %
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The stated objectives for this item are listed on page III-10 of the Forest Plan. The outputs from the Forest Road Development Program during 2002 are shown on the Forest Plan Evaluation Table of this report. The two main reasons for not meeting the stated goals for this item include the reduced timber program and the current National effort to develop the most cost-effective transportation system considering both construction and maintenance funding.

Recommendation: The Forest has completed a comprehensive Roads Analysis that provides useful baselines for future transportation system planning. Based on this Roads Analysis, site-specific proposals for any new road construction or decommissioning project will be analyzed and documented in compliance with the NEPA process, including public involvement. No change to the Plan is currently needed.

Monitoring Item 42: Trail Construction and Reconstruction

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Allowable Variance = +/- 25 %
Actual Variance = + 293 %
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The scheduled ouput for this item is 2.7 miles per year, as shown in the Forest Plan (page III-6). During Fiscal Year 2002, the Forest accomplished 10.6 miles, which is 293 percent of the stated objective. This was the result of the availability of additional funding and personnel, which may not occur in the future.

Recommendation: The amount of funding and personnel that is available on an annual basis cannot be accurately predicted. Therefore, no changes to the Forest Plan are recommended at this time.

Monitoring Item 43: Fuel Treatment

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Allowable Variance = +/- 25 %
Actual Variance = - 94 %
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The stated objective for this item in the Forest Plan is 1,437 acres annually during the period 2001 – 2010, however, only 84 acres were treated on the Forest during 2002. This item measures the treatment of fuels (such as logging slash) directly created by forest management activities. It does not include fuel reduction projects, such as those being planned under the present National Fire Plan.

Recommendation: The primary reason for not meeting this objective is due to the reduction in the number and size of timber sales offered during previous years. The number of acres requiring fuels treatment is directly related to the level of vegetation treatment activity that occurs as a result of the timber sale program. This is a problem with implementation rather than the Forest Plan, therefore, no change is needed.

Monitoring Item 45: Land Exchanges

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Allowable Variance = +/- 50 %
Actual Variance = - 100 %
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The Forest Plan objective is 160 acres per year, however, the Allowable Variance is measured for the ten-year period. No land exchanges were accomplished during 2002.

Recommendation: The amount of land exchange has varied significantly on an annual basis, resulting in greatly exceeding the predicted outputs during the first planning period. One year may result in a single large land exchange, while several other years may pass without any exchanges being accomplished. This item needs to be examined during Forest Plan revision to determine the relevancy of monitoring in future years. No changes to the Forest Plan are needed at this time.

Monitoring Item 46: Right-of-Way Acquisition

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Allowable Variance = +/- 50 %
Actual Variance = - 96 %
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The Forest Plan objective is 25 cases per year, however, the Allowable Variance is measured for the tenyear period. Only one case was accomplished during 2002. Recommendation: The number of rights-of-way cases has varied significantly on an annual basis. One year may result in numerous cases, while several other years may pass without any cases being accomplished. This item needs to be examined during Forest Plan revision to determine the relevancy of monitoring in future years. No changes to the Forest Plan are needed at this time.

E. To determine how closely management Standards and Guidelines have been followed (36 CFR 219.12(k)).

The Forest Plan was intended to be dynamic, responsive to changing conditions, and also to meet the needs of the American people. Project-level design reports and monitoring activities indicated that most of the management direction and requirements in Chapter III of the Plan were met during 2002. Each year that projects are implemented on the ground, Forest personnel acquire a better knowledge and understanding of the Standards and Guidelines in the Forest Plan. This experience, combined with monitoring and evaluation, helps to improve the quality of resource management on the Forest.

Two levels of evaluating management activities on the Forest have been historically used, in order to meet the goals and objectives of the Forest Plan. One level is a General Management Review (GMR) by the Regional Office, which monitors and evaluates overall Forest management. The other level consists of a Forest review of management activities on the Ranger Districts. One purpose of these annual reviews is to determine if the activities being reviewed are working toward meeting the overall goals of Forest Planning. No formal reviews were performed on the Forest during 2002.

Results of Monitoring Individual Items (Forest Plan, Chapter IV).

Each of the fifty Monitoring Items in Chapter IV of the Forest Plan are listed below. Included is a description of the monitoring activity, the results of that monitoring, and a recommended course of action for correcting any deficiencies that were identified by the Staff Specialist for that resource.

Monitoring Item 1: Off-Road Vehicle Damage

As a result of approving the new Travel Management Order # 2001-03 on August 1, 2001, (requiring that all travel must be on designated travelways with few exceptions) the Brush Creek/Hayden District has now marked all the entrances to the Forest with portal signs, thus removing the temporary signs that were installed last year. In addition, more carsonite posts with route numbers were installed. The District also did some road monitoring work, including checking for the presence of information signs.

There is extensive opportunity for user-created trails to be obliterated and rehabilitated on Pennock Mountain. The District Ranger and travel management crew posted the user-created roads on the north and south end of Pennock Mountain as closed. An information bulletin board was also installed on the Pennock Mountain Trail # 218.

Approximately 400 information packets, which included the Travel Management Order, were handed out during hunting season by the recreation staff. These "hunter patrols" were done mainly during the last half of September and all of October, and included "tagging" approximately 550 trailers, tents, and other camps. The majority of the individuals contacted agreed that something needed to be done about the high ATV use and user-created trails.

The Brush Creek/Hayden District issued several violations for off-road damage along FDR 103. Repeated off-road vehicle use has severely damaged a wet meadow along a tributary to South Brush Creek, along FDR 103, approximately ¼ mile past North Twin Lake. On July 19, 2002, district personnel observed multiple tracks in this meadow. The width of the tracks indicated that a 4-wheel drive truck or jeep was used, and not an ATV. The tracks showed repeated loops around the meadow, with some of the tracks being up to 6 inches deep.

On July 22, the forest road crew observed more damage to the meadow. The tracks covered virtually the entire northeast portion of the meadow, and were much more severe in the middle of the meadow, with ruts up to 18 inches deep in places. On July 24, the road crew used a small bobcat to fill in the tracks. Logs were placed along the road to restrict access to the meadow. The meadow will be monitored to determine if further restoration work is needed.

A new user-created trail was identified in the Upper East Fork of the Encampment River, while off-road use in the Platte River Wilderness continues to be a problem. The buck-and-pole fence at White Rock Canyon still needs reconstruction, in order to close the user-created trails. The Roaring Fork trail that was signed during 2001 as non-motorized in accordance with the Forest Plan, also continues to be a problem area. This trail has almost continuous use, which impacts the recreation experience for other users. Patrols during hunting season resulted in some violations being issued.

On the Laramie District, 17.7 miles of user-created roads/trails were closed during 2002 in the Pole Mountain area. However, during hunter patrols district personnel identified a significant amount of offroad damage during bow hunting season. A pre-hunting season coordination meeting was held with Wyoming Game & Fish personnel to inform them of the regulations and share information. As a result, G&F wardens helped to collect information about potential violations.

Game and Fish personnel and adjacent private landowners reported numerous illegally built trails. The trails were discovered in the Eagle Peak area, Slick Mountain and Thirty-Two Canyon, and west of Warbonnet Peak. Carsonite posts are being installed to indicate these areas are closed to motorized use. No change to the Forest Plan is needed.

Monitoring Item 2: Trail Condition

The Brush Creek/Hayden District completed deferred maintenance surveys during 2002, thus accomplishing the target of 86 percent of the trails on the District. Portions of the Continental Divide, Big Creek, Verde Mine, and Lake Marie Falls trails still remain to be surveyed.

On the Douglas District, the North Laramie River, Laramie Peak, Roaring Fork (from Friend Park to Goochie Park), Friend Creek, and Deer Creek trails were cleared and maintained. The trails within the vicinity of Ashenfelder Basin that were affected by the Hensel fire were not maintained, including the Cow Creek Mountain, Twin Peaks, and the remainder of the Deer Creek trail. The 20 miles of trail near Upton had maintenance performed by a volunteer crew.

There were no deferred maintenance surveys conducted on the Douglas District due to the Hensel Fire, which started June 6 and was declared officially out during October. The trails within the Hensel fire area include; the Roaring Fork Creek, Ashenfelder Creek, South Black Mountain, and Lost Creek trails,

which were all scheduled for deferred maintenance surveys (17 miles total). Deferred maintenance surveys on those trails are scheduled for next season.

The Laramie District conducted deferred maintenance surveys on a total of 20 percent of wilderness and non-wilderness trails. Condition surveys are available for each trail inventoried. While the majority of the trails surveyed were in good condition, some deferred maintenance needs were identified for each trail. These consisted primarily of waterbar deterioration, insufficient signing and trail marking, and inadequate drainage. The Laramie District trail crew performed annual maintenance on 96 miles of non-wilderness trails and 23 miles of wilderness trails. No changes to the Forest Plan are needed at this time.

Monitoring Item 3: Dispersed Recreation Use and Experience

District recreation staff personnel administered user surveys from October 1, 2001 until September 30, 2002. This was part of a nationwide survey of recreation use, in which the Medicine Bow National Forest participated. These surveys were conducted in general forest areas, developed day-use sites, developed overnight-use sites, and wilderness sites. These random surveys consisted of individual interviews, which included some monitoring questions. No changes to the Plan are needed at present.

Monitoring Item 4: Dispersed Campsite Condition

The Brush Creek/Hayden District has classified the dispersed sites along North Spring Creek (north of NFSR 452) as Cole condition class 4 and 5. These sites will be closed for rehabilitation during spring, 2003. Forest Road number FSR 452.1k, which accessed a dispersed campsite, was closed during 2001, however, during 2002, the public started driving around the buck and pole fence at the east side. Subsequently, the fence was repaired, in order to stop people from entering that area.

District recreation and range personnel continued to implement the Tag Program, in order to inform the public of the 21-day limit for camping on the Forest. Campers were tagged, and if they stayed on the forest beyond the allowed time, a violation was issued. A total of approximately 1,000 tags were issued.

The Laramie District continued to survey dispersed campsite conditions utilizing Frissell Condition Classes and GPS technology, even though these efforts have been significantly hampered due to insufficient funding and inadequate personnel. However, certain sites were rehabilitated or closed in accordance with existing Forest Plan Standards and Guidelines, and the District plans to address this monitoring item more thoroughly during the 2003 field season.

LaBonte Canyon continues to be the most popular dispersed camping area on the Douglas District. Most users seem to feel personally responsible for "their" site, thus they take good care of it and cause minimal damage to the area. No change to the Forest Plan is necessary.

Monitoring Item 5: Developed Site Use

Developed site use was lower than previous years, most likely due to the extensive wildfires in the region and the total ban on campfires. Some campgrounds on the Laramie District continued to be operated under the Recreation Fee Demo Program. Based on fees collected from campgrounds and day-

use areas, approximately 95,000 individuals visited developed recreation facilities on the Laramie District, 19,500 on the Brush Creek/ Hayden District, and 1,600 on the Douglas District. Approximately \$209,000 was collected during FY 2002 at developed recreation sites and from the sale of day-use passes.

The Forest has been implementing a Cabin Rental Program during the last few years. Little Brooklyn, Spruce Mountain Fire Lookout, LaPrele Guard Station, Jack Creek Crew Quarters, Jack Creek Guard Station, and the Bow River Crew Quarters were rented out under the Recreation Fee Demonstration Program. During 2002, the total income for renting these facilities was \$ 11,460, which was an increase of \$ 2,880 from the previous year. The use of these sites is expected to increase because they have been added to the National Reservation System. The Sandstone Cabin and Brush Creek Work Center Barracks are also being prepared for renting.

Interpretive Programs were conducted on the Brush Creek/Hayden and Laramie Ranger Districts. There were 669 visitors in attendance at six (6) Moon Walk Programs. In addition to the Moon Walks, the District also sponsored other interpretive activities at different developed sites and visitor centers.

The Brush Creek/Hayden District hosted 8 Interpretive Programs attended by 176 people, and three environmental education programs attended by 150 children. More than 5,000 visitors stopped in at the Brush Creek Visitor Center, while the Kennaday Peak Fire Lookout attracted approximately 800 visitors. The Centennial Visitor Center recorded 10,455 visitors during the 2002 calendar year, compared to 12,803 visitors during the previous year. No changes to the Forest Plan are needed.

Monitoring Item 6: Developed Site Condition

The Laramie District inventoried all developed sites, in order to determine the deferred maintenance needs. A condition survey report is available for each site that was inventoried. While the majority of the sites and facilities were in fair to good condition, some minor deferred maintenance needs were identified for each site. Deteriorating tent pads, tables, delineators, fire rings, outhouses, and site spurs generally need some repairs. The District attempted to address many of these deficiencies, but the lack of funding and personnel prevented much of the work from getting accomplished.

On the Brush Creek/Hayden District, some hazardous trees in developed sites were removed using Recreation Fee Demonstration Program funds. Gravel was hauled into the sites at the Bow River, South Brush Creek, Ryan Park, and Lake View Campgrounds. The sites were widened, leveled, and generally improved, which was done with the assistance of the road crew. In addition, the boat dock at Lake View Picnic Ground was repaired, which is associated with the Lake View Campground. Work on the Mirror Lake Picnic Ground access road was completed, while an accessible fishing platform was installed on the lake. Plans are presently being finalized to reconstruct the picnic area.

Fees and garbage pickup were suspended at Curtis Gulch Campground from about mid-summer until the end of the season due to numerous problems at the site. In addition to hazardous cottonwood trees, the leaking toilet, and a fence that has fallen down allowing cattle to enter the campground, a black bear started to wander into the campground searching for food. In order to reduce the attraction, the garbage cans were pulled and signs were placed within the campground to warn campers of the potential danger.

The remaining half of the buck and pole fence around Esterbrook Campground was removed and rebuilt using rec-fee demo collections. A weeklong PIT project was successfully organized to do general maintenance and repairs to the LaPrele Guard Station rec-fee demo cabin. Major cleaning, painting, repairs, cleanup, and landscaping was accomplished. No change to the Plan is needed at this time.

Monitoring Item 7: Downhill Skiing Use

There were 42,662 lift tickets sold during 2002, which equals 21,331 recreation visitor days (RVDs). No change to the Forest Plan is needed in relation to this item.

Monitoring Item 8: Wilderness Use

Although data for the amount of wilderness use was not available during 2002, it is believed to be considerably less than previous years due to the extensive wildfires in the region and the ban on campfires. The amount of use was estimated to be low to moderate in all wilderness areas on the Forest.

Rafting on the Platte River was essentially limited to non-commercial users due to extremely low water levels. Rafting use was concentrated during the last week of April and the first week of May. As a result, the amount of use in the Platte River Wilderness was also lower than expected due to the reduced water flow.

During September and October, hunters were contacted about wilderness areas and were informed about current regulations, the location of the boundaries, and ethics (leave no trace information). The District finished removing a vehicle from the Platte River Wilderness, which was driven into the area and wrecked during October, 2001. No change to the Forest Plan is needed.

Monitoring Item 9: Wilderness Campsite Condition

No wilderness campsite condition reports were filed during 2002. The number of days that wilderness rangers were able to patrol was decreased considerably due to these individuals performing fire-fighting duties. This item will be more thoroughly addressed during the 2003 field season.

Three volunteers accomplished general maintenance on some of the Wilderness trails. They noted the location of all campsites along the trail and monitored the amount of use. This survey showed that the amount of use was low again during 2002 due to the dry conditions and the fire ban. No change to the Forest Plan is needed at this time.

Monitoring Item 10: Adopted Visual Quality Objectives

The following District projects were reviewed for compliance with the applicable Visual Quality Objectives (VQOs) during the 2002 field season:

<u>Brush Creek/Hayden District - South Fork French Creek Big Creek New Bridge Projects:</u>
Two new bridges were constructed during Fiscal Year 2002. The old wooden bridge on FDR 225 across

South Fork French Creek was replaced. The self-weathering, galvanized guardrails with wood posts and structures that comprise the bridge complement the surrounding forest landscape. This bridge met the adopted visual quality objective of partial retention. The old, narrow, wooden bridge on FDR 498 across South Fork Big Creek was also replaced. The new bridge is made of concrete, which was stained with natural tan, earthtone colors, in order to better blend with the surrounding landscape. This bridge also met the visual quality objective of partial retention.

Douglas District - Albany Peak and Harris Park Road Prescribed Burn Projects:

Several proposed burning project sites were reviewed on November 8 with fuels specialist Ralph Cockrell. The conditions to implement the burns were not appropriate at the time of the field review, therefore, they were delayed until November 20 to 22. The prescribed burn projects were designed to improve the quality of vegetation for wildlife on Albany Peak, and also to reduce fuel loads and create defensible space along Harris Park Road that is adjacent to private property. These burned sites will be revisited during FY 2003 to determine compliance with the adopted visual quality objectives.

The Hensel Fire was a large wildfire that occurred on the District during 2002. It burned through some ponderosa pine stands that had been previously harvested using salvage and thinning treatments. Low to moderate fire damage occurred in these stands, compared with severe damage that resulted in the adjacent, thick stands on private lands that had not been treated. Many standing trees in the treated stands were not damaged, with the only visible evidence being blackened bark. On private lands the fire destroyed most of standing trees including understory and vegetative ground cover. The blackened landscapes on private lands reduced the scenic quality and will require much more time for vegetation to become established and mitigate the visible scars than the adjacent stands that had been treated.

<u>Laramie District - Holmes Timber Sale</u>: Two timber harvest units adjacent to FDR 500 were reviewed during FY 2002. Individual Tree Mark (ITM) unit 16 and clearcut unit 17 were treated during the spring of 2002. Measures to mitigate impacts to the visual resources were developed and applied to these two units. Excellent attention was given to the layout, skid trail location, and retaining vegetation adjacent to FDR 500 corridor, in order to minimize visual impacts and blend with the surrounding forest. These two units met the visual quality objective of partial retention. No change to the Forest Plan is deemed necessary at this time.

Monitoring Item 11: Compliance with Cultural Resource Regulations

During Fiscal Year 2002, a total of 90 projects were submitted to the Heritage team for cultural resource input into National Environmental Policy Act analysis, and for compliance with Section 106 of the National Historic Preservation Act. The Heritage staff reviewed each project to determine the potential for affecting cultural resources. A literature search was also conducted for all projects. Field inventories and compliance reports were sent to the State Historic Preservation Officer (SHPO) for forty-seven projects. The Forest is in compliance with the National Range Programmatic Agreement (PA), the Regional Memorandum of Understanding (MOU) regarding the effects of range Allotment Management Plans, the Beetle Management and Mechanical Fuel Reduction PA, and the Prescribed Fire Program Regional PA.

Project leaders and contracting officers need to keep the Forest Cultural Resource Staff informed of modifications to ongoing projects. This will help to ensure that the Forest continues to be in compliance

with Section 106 of the NHPA. This matter relates to implementation rather than Forest Plan direction. No changes to the Plan are needed at this time.

Monitoring Item 12: Protection of Historic Sites

As stated above in Item 11, Class I inventories were conducted for 90 projects on the Forest to determine the level of compliance with Section 106 of the National Historic Preservation Act. No adverse impacts to any historic sites were identified. Monitoring for this item validates that the integrity of historic sites on the Forest is being maintained. The Forest Heritage Team conducted four Passport-in-Time projects and one Tribal Conservation Youth Corp project resulting in 3,116 volunteer hours. These volunteer projects meet the Forest's requirements under Section 110 of the National Historic Preservation Act. It is recommended that Line Officers responsible for compliance with the NEPA and Section 106 of the NHPA need to emphasize that all projects on the Forest must be completed in accordance with these Federal laws and Forest Plan requirements. No change to the Forest Plan is needed at this time.

Monitoring Item 13: Horizontal Diversity

There has been no significant change in the amount of horizontal diversity reported between 1992 and 2002. The problems inherent in reporting this item (data quality/completeness; the large number of acres that must change in order to cause a percentage change) are the same as previous years. The utility of this monitoring item will be evaluated during the Forest Plan Revision. No change is needed now.

Monitoring Item 14: Vertical Diversity

There has been no significant change in the amount of vertical diversity reported between 1992 and 2002. The problems inherent in reporting this item (data quality and completeness; the large number of acres that must change in order to cause a percentage change) are the same as for previous years. The utility of this monitoring item will be evaluated during the Forest Plan Revision. No change is needed.

Monitoring Item 15: Aspen Retention

Site, location, and size-class information for aspen is stored in each Ranger District RMRIS database (formerly R2RIS). The number of acres of aspen in Management Areas 4D (emphasis on aspen management), and the amount of aspen included within other Management Areas comprises the total amount of aspen on the Forest. As the amount of aspen changes due to natural succession or project activities, the information is updated in the District databases for monitoring and evaluation purposes.

The Forest Plan requires the continuous retention of 77,770 acres of aspen on the Forest (page III-87). This amount may vary by plus or minus 10 percent within the 4D Management Area, as stated on page IV-31 of the Plan. The data for FY 2002 indicated that 84,042 acres of aspen are on the Forest, with 73,825 acres in 4D areas. This is the same as the previous year and well within the Allowable Variance. This item should be evaluated during the Forest Plan Revision to ensure that it is valid and relevant to the Forest Plan Standards and Guidelines in Chapter III. No change to the Forest Plan is needed.

Monitoring Item 16: Old Growth Retention

Information for this item is stored in each Ranger District RMRIS database. During FY 2002 the Districts reported approximately 116,287 acres of old-growth designated on the Forest, which is the same as the previous year. This total also includes old growth stands in Wilderness Areas, stands with an Old-Growth Score Card rating less than 38, and areas designated as corridors that connect old-growth stands. The inclusion of these items was necessary to provide for "spacial consistency;" the delineation of stands that are complete, coherant, and reasonable to manage. Although the data indicates that the amount of old growth in 4B Management areas does not comply with the direction stated for this item in Chapter IV of the Forest Plan (page IV-32), the Districts are making progress toward meeting the stated goal. The requirement is being met, however, in 3A and 9A Management Areas, and also on a forestwide basis (page III-14,c). The Districts need to complete the task of designating an adequate number of acres of old growth within 4B Management Areas in order to comply with this Monitoring Item. Old growth will be addressed during the Forest Plan Revision process to ensure accuracy and usefullness. No changes to the Forest Plan are necessary at this time.

Monitoring Item 17: Diversity of Coniferous Tree Species

The information for this item was derived from the District RMRIS databases for 2002, and showed no significant change from the detailed, "benchmark" data that was compiled in 1992. During recent years, however, several large wildfires have burned nearly 13,000 acres of forest, thereby converting these lands to grass/forb conditions. No change is in the Forest Plan is indicated at this time.

Monitoring Item 18: Winter Range Carrying Capacity

District personnel inspected approximately 10% of the designated winter range on the Medicine Bow NF and Thunder Basin NG. Some areas that function as transition range or wilderness were also inspected. Methods included ocular estimates as well as range utilization monitoring. Carrying capacity of the winter range on the Medicine Bow NF is reported in the Table below. Final figures are rounded due to the imprecise nature of these estimates. Winter range habitat continued to provide adequate forage for deer and elk as evidenced by stable populations reported by WGFD (2001) for these species.

Carrying Capacity of Winter Range on the Medicine Bow National Forest in FY 2002.			
District or Area	Elk	Mule Deer	
Brush Creek Hayden	1,485	20,402	
Laramie District	1,250	7,300	
Laramie Peak	1,200	1,600	
Thunder Basin National Grassland	320	5,000	
TOTAL	4,255	33,702	
ROUNDED TOTAL	4000	34,000	

However, drought conditions resulted in reduced available forage. WGFD (2001) reported significantly reduced leader growth on shrubs commonly browsed by big game in the winter. Furthermore, WGFD (2001) reported reduced body condition for big game on portions of the Medicine Bow National Forest in 2000-2001 compared to 1997-1999. This reduced body condition was attributed to the drought and subsequent reduced forage.

In general deer and elk populations remain stable, or are increasing. Bighorn sheep numbers on the Laramie Peak herd are slowly increasing, those on the Douglas Creek herd are stable or slowly declining, and the Encampment herd has remained small and stable for the past twenty years. The proximity of domestic sheep herds makes habitat improvement projects and the possibility of bighorn sheep transplants for the Encampment herd problematic. (Annual Big Game Herd Unit Report, WGFD, 2001).

This item needs to be addressed during the Forest Plan Revision. Due to the scheduled date for a Final Forest Plan Revision in December 2003, no change to the Forest Plan is necessary at this time.

Monitoring Item 19: Snag Retention

A variety of vegetation treatments were examined by District personnel in FY2002, including but not limited to Joe's Park, Jack Creek III, Cedar, and West Barrett timber sales, as well as, Ryan Park/Ten Mile fuels project, Battle fuels project, Overlook timber sale, Sourdough gravel pit, and Lost Cabin mine excavation. The units that were visited were determined to be in compliance with the Forest Plan Standards and Guidelines. Snag retention is one of the considerations included in the analysis and as a mitigation measure for all major vegetation management projects. In large projects such as timber sales, timber sale administrators monitor projects throughout the field season. Snags are left at or above the density required in the Forest Plan. Snags are often left in groups along the edges of clearcuts where opportunity exists rather than scattered within openings created by the treatments. The intent of this practice is to reduce susceptibility of retained snags to windthrow and provide a habitat component more attractive to target wildlife species. This practice is consistent with recommendations made by researchers from the University of Wyoming and Forest Sciences Laboratory in Laramie. The Douglas District indicated that past extensive mountain pine beetle infestations have provided enough snags District-wide so that sang retention is not a problem.

Snag retention issues that need to be studied during future years include determining: the reduction of large snags due to firewood gathering in heavily roaded areas; whether there is a need to increase snag density standards based on current literature; whether there is a need to increase snag density based on loss to wind throw; whether there is a conflict between snag retention guidelines and OSHA safety regulations; and the impact of such regulations on the actual number of retained snags. This effort will depend upon both sufficient personnel time and adequate funding.

This item needs to be addressed during the Forest Plan Revision.

Monitoring Item 20: Threatened and Endangered Species

Wildlife biologists performed surveys for Threatened and Endangered (TE) species during fiscal year 2002.

The spread of sylvatic plague on approximately 17,000 acres of black-tailed prairie dog colonies was monitored in relation to the future possibility of reintroducing the endangered black-footed ferret. These same acres were monitored for the presence and status of mountain plover (Proposed).

No active bald eagle nests were observed on Douglas District. On Brush Creek Hayden District, one of the four known bald eagle nests was active. The sighting of young bald eagles at another location on the District suggested a possible undiscovered nest.

The National Lynx Survey (USFS) provided funding to complete the 3rd year of a 3-year scent bait and hair trap survey for Canada Lynx. The District set up 75 scent/hair trap stations on the Snowy Range. Two hair samples were collected and sent for laboratory identification of species.

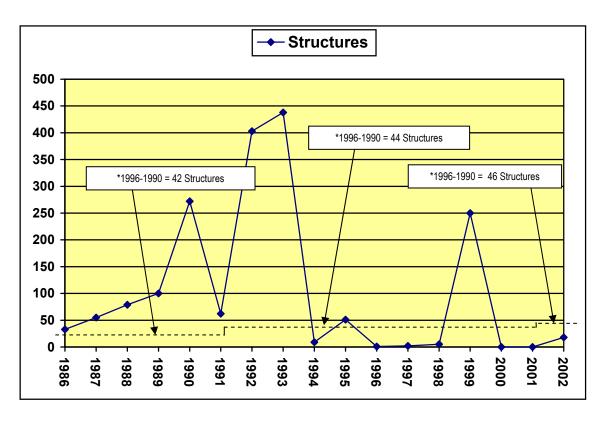
Visual inspections of riparian vegetation on Pole Mountain (Laramie District) were conducted to ensure that adequate residual cover for Preble's meadow jumping mouse remained after grazing by livestock. Some localized problems were noted in riparian areas where the stubble heights of *Carex* species after grazing were less than 4 to 6 inches. These areas were generally less than 10 acres and resulted from a concentration of livestock before being moved to another pasture. Presence/absence surveys for Preble's meadow jumping mouse were not conducted, but are planned and funded for Fiscal Year 2004.

No change to the Forest Plan is necessary at this time.

Monitoring Item 21: Wildlife and Fish Habitat Improvement

The Laramie Ranger District improved wildlife habitat by adding 11 bear-proof containers to recreation sites. The Brush Creek/Hayden District added 4 bear-proof containers to recreation sites and enhanced 20 acres of aspen cover type by removing encroaching conifers. Douglas District improved big horn sheep habitat by adding 1 guzzler water development on Reese Mountain. Two fish structures were installed. No change to the Forest Plan is indicated at this time.

Wildlife and Fish Habitat Improvement



^{*} Forest Plan Annual Output Objective (Forest Plan, page III-7) = ------

Monitoring Item 22: Elk Habitat Effectiveness

The Douglas Ranger District reported no change in roads for FY 2002, therefore elk habitat effectiveness was interpreted as continuing to meet Guideline 7031MB (Forest Plan, page III-76). This Guideline pertains to the maximum road density within fourth-order watersheds. The Brush Creek Hayden District reported the following elk habitat effectiveness estimates for the Sierra Madre Mountain Range. Habitat capability is expressed as an index from 0 to 1, with 1 being ideal elk habitat. Below, existing conditions portrays elk habitat capability as it currently exists. The no roads column describes the increase in capability if all roads were decommissioned. This illustrates that the area is not capable of achieving a rating of 1 due to other characteristics in the vegetation cover. Finally, the hunting season column describes elk habitat effectiveness during the hunting season when all open roads become primary roads with high traffic loads. Elk habitat capability declines dramatically during the hunting season.

Winter Range Habitat Capability for Elk in the Sierra Madre			
Winter Range	Existing Condition	No Roads	Hunting Season
Battle	0.39	0.48	0.24
North Sierra Madre	0.49	0.50	0.32
Holroyd	0.38	0.45	0.16

We recommend revising the approach to estimating elk habitat effectiveness in the Forest Plan Revision. A new approach should involve vegetation cover, road density, and perhaps an estimate of security areas.

Monitoring Item 23: Riparian Condition Rating

During FY 2002, rangeland management specialists evaluated riparian vegetation on the Forest using utilization and ecological condition factors to determine compliance with the Forest Plan Standards and Guidelines. Riparian areas are considered as inclusions in larger vegetation stands and are displayed as a percentage of that stand, rather than as a separate site. Riparian area estimates were historically derived from the Resource Information System (R2RIS) database for each Ranger District. During 1999, however, the information was transferred into the Region 2 INFRA database.

Due to the conversion and transfer of all inventory and monitoring data from the FSRAMIS database into the INFRA database, the information derived for this monitoring item was highly variable or was not available. Therefore, specific data for this item was not reported for Fiscal Year 2002, but should be available for 2003. No changes to the Plan are recommended at this time.

Monitoring Item 24: Habitat Capability Trends of Management Indicator Species

Financial and personnel commitments to developing a new Forest Plan and support for summer 2002 wildfires limited monitoring of MIS population trends. Most observations of MIS were from site clearances completed in support of timber, fuels, minerals, lands, and recreation program projects. These sightings of MIS included mule deer, elk, bald eagles, pine martens, hairy woodpeckers, sandhill crane, and yellow warbler.

A point-count songbird survey was completed in the Battle Creek area in cooperation with the Rocky Mountain Bird Observatory. MIS encountered on that survey included ruby-crowned kinglet, blue grouse, and hairy woodpecker.

Lambing surveys were conducted on July 8th for the Encampment River bighorn sheep herd in cooperation with the Bureau of Land Management and Wyoming Game and Fish Department. This annual survey is conducted to monitor herd distribution and lamb recruitment. The upper and lower lambing grounds were surveyed. One ewe was observed on the upper lambing ground. No bighorns were observed on the lower lambing ground. Two ewes and 1 Class III ram were observed incidentally along the Encampment River during FY 2002. The Districts also reviewed the Game and Fish Department herd objectives for elk, mule deer, and bighorn sheep population information.

Transect searches were conducted for northern goshawks as support to the Timber, Fuels, Planning, and Minerals programs. The inventory encompassed approximately 5,572 acres. One previously unknown nest was identified and six previously located nests were found to be inactive. One previously located nest was determined to be active.

Searches were conducted for nesting greater Sandhill cranes as support to the Battle Fuels project and Blackhall/McAnulty Timber Sale. Adults and young were observed near Battle Creek in 1999. Tracks of greater Sandhill cranes were located near Battle Creek but no individuals or nests were located.

Fisheries and wildlife biologists conducted about 1500 acres of amphibian/wetland habitat inventories on the Medicine Bow National Forest and Thunder Basin National Grassland. Tiger salamanders and northern leopard frogs (both Forest Service sensitive species), wood frogs (sensitive and MIS) and boreal western toads (sensitive and MIS) were located during surveys. The U.S. Fish and Wildlife Service amphibian survey protocol was used to conduct amphibian surveys. Key amphibian findings include the following:

- A detailed monitoring plan was prepared and implemented, in order to gain additional information about a potential boreal toad breeding population identified in 2001 on the Brush Creek/Hayden Ranger District. Two juvenile boreal toads were captured (and another toad observed) at this location and placed in a captive breeding program at the Saratoga National Fish Hatchery. Additional monitoring in 2003 is planned to validate breeding at this location.
- ❖ Although no boreal toads were found in areas of historic sightings, a new boreal toad location was identified on the Laramie Ranger District. Future monitoring is planned to determine whether breeding is occurring at this location.

In addition, the Brush Creek Hayden District intensively surveyed four sage grouse leks (utilizing existing range-wide protocols). Three Columbian sharptail grouse leks were also surveyed.

Searches were conducted for another species of interest, the flamulated owl, along Battle Creek in cooperation with the Rocky Mountain Bird Observatory. One flammulated owl was identified in 4 hours of survey.

An analysis of the information suggests that habitat is being retained and protected in adequate proportions to sustain populations for all species. Although ample habitat appears to be present for boreal toads, their over-all decline in the western United States is often attributed to the introduction of a Chytrid fungus (Boreal Toad Conservation Plan and Agreement, Revised February, 2001).

A change in the list of Management Indicator Species is recommended to better focus monitoring efforts on management issues. Such a change can be incorporated at the time of Forest Plan Revision.

Monitoring Item 25: Colorado River Cutthroat Trout (CRCT).

During Fiscal Year 2002, the North Zone Aquatics Team continued to support the Wyoming Game and Fish Department effort to restore Colorado River cutthroat trout (CRCT) in the headwaters of the Little Snake River. Monitoring was conducted to determine status/trends of CRCT populations, collect samples for disease or genetic testing, assess the success of ongoing non-native trout control and restoration projects, and determine the need for additional structural protection of CRCT populations. Approximately 10 miles of CRCT habitats were monitored as part of this effort. Portions of Mill Creek, Deep Creek, Big Sandstone Creek, and the North Fork Little Snake River were electrofished. Cutthroat habitat inventories were conducted in East Fork West Branch, North Fork Rose Creek and Hell Canyon to determine the probability of cutthroat persistence in habitats potentially affected by the proposed State land exchange. The results of monitoring and inventory help support adaptive management strategies for conservation and recovery of this rare native trout, which are described below:

- Monitoring from 2000-2002 indicates the North Fork Little Snake River still cannot be considered free from competing/hybridizing non-native trout, despite three chemical treatments. Large rainbow trout were found above a natural waterfall where they were first identified in 2001. Additional monitoring is planned, in order to evaluate sources and potential control measures for these rainbow trout. As in 2001, brook trout had survived or returned following previous chemical treatments, and continued to be present in several reaches during 2002. Additional removal by electrofishing and chemical treatment is planned for the summer of 2003.
- ❖ The West Branch barrier was scheduled for a cooperative reconstruction project based on the results of previous monitoring, which indicated that the structure was at risk of failing. A five-partner project was completed during 2002 to stabilize and improve this barrier. This \$ 40,000 investment should reduce the risk of non-native invasion in the West Branch, while restoration efforts continue in the North Fork Little Snake River.
- Restored CRCT populations in upper Deep Creek were confirmed to be robust, with high densities of healthy trout present throughout several miles of secure habitat. Lower portions of the restored reaches of Deep Creek have not yet been recolonized by cutthroat trout, and future monitoring will track the expansion of this population.
- Minor repairs made in 2001 to the Mill Creek fish barrier were evaluated for efficacy in improving integrity and preventing barrier failure. Although the population in Mill Creek appears to be stable at this time, the barrier will likely need significant reconstruction to prevent future failure. An aspen enhancement project is still being considered in this watershed to improve riparian and aquatic habitats used by CRCT and other species.
- Disease sampling during 2002 confirms that, while CRCT populations are currently free from whirling disease and other fish pathogens, there are sources of infection located in downstream reaches near the CRCT recovery waters. This indicates the need for extreme caution when managing CRCT habitats to prevent introduction of devastating fish pathogens.
- ♣ Habitat inventory-based modeling in three streams potentially affected by a large land exchange indicated that the potential is low to absent for significant, stable populations in the upper reaches of the East Fork West Branch and North Fork Rose Creek. Modeling confirmed that there is potential for continued low population abundance in Hell Canyon habitats. No adverse cumulative impacts from the 2000 Hell Canyon Fire were observed.
- Followup monitoring indicates that no Colorado River cutthroat trout are present in reaches of Big Sandstone Creek, where individual cutthroat had been reported several decades previously.

No change to the Forest Plan is recommended at this time.

Monitoring Item 26: Common Trout Species

During Fiscal Year 2002, the North Zone Aquatics Team began implementation of a systematic aquatic MIS monitoring program. Under this strategy, representative reaches of all major streams in one or more 5th level watersheds would be monitored annually to update population information using existing Wyoming Game and Fish Department (WGFD) sources. This broad-scale strategy was partially implemented, although some project-specific monitoring was also conducted on specific stream reaches.

Population monitoring took place in portions of the North Fork Little Laramie River, Rock Creek, Big Creek, Douglas Creek and Encampment River watersheds. Common trout were monitored in the headwaters of the Little Snake River as part of the CRCT restoration program described above. On the Thunder Basin National Grassland, cooperation continues with the WGFD to monitor warm water impoundments, in order to determine their utility as sport fisheries and wetland habitats. The Grassland program included population sampling in the Little Powder River, several of its tributaries, and the Little Powder Reservoir. Fisheries findings included the following:

- Common trout populations were monitored in 34 reaches on 19 streams on the Laramie and Brush Creek/Hayden Ranger Districts. This information significantly enhanced the MIS data in two 5th level watersheds and portions of 3 other 5th or 6th level watersheds. This sampling strategy will continue to be implemented to update additional watershed information in 2003.
- Three stream reaches and one small impoundment were sampled in warmwater ecosystems on the Thunder Basin National Grassland. Finescale dace, a native species of potential regional concern, were identified in reaches of the Little Powder River. Yellow perch, a desired non-native game fish, were documented in a new location (Little Powder Reservoir) on the Grassland as a result of this monitoring effort. Plans for 2003 include expanding this program to evaluate existing or potential effects on fish or amphibian habitats and populations due to the production of water from coal bed methane development.
- ❖ Impediments to resident common trout movement were studied at 20 culverts during road condition monitoring on 160 miles of roads. Three culverts with potential fish passage concerns were identified.
- ❖ Brook trout and rainbow trout were found in CRCT recovery waters (see Monitoring Item 25).

No change to the Forest Plan is recommended at this time.

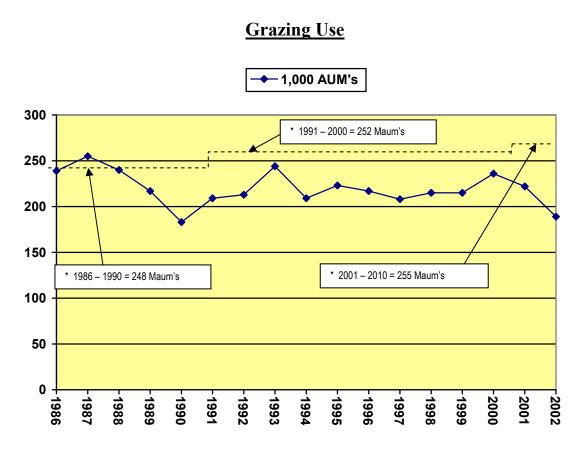
Monitoring Item 27: Grazing Use

The Forest converted the FSRAMIS database program to a new one called INFRA during 1999 to monitor permitted and actual grazing use on National Forest System lands. Actual grazing use is evaluated to ensure that Forest Plan Direction is followed. Livestock grazing use must not deviate more than 10 percent from the Forest Plan objective of 255,000 AUMs annually between the years 2001 and 2010. The table below shows the results of monitoring actual use during 2002.

Total AUM's Forest Plan	Total AUM's Used in F.Y. 2002	Percent Deviation From Forest Plan
255,000	189,100	- 26

Actual grazing use for 2002 was again lower than the previous year due to a variety of reasons, especially the continuing severe drought conditions across the State. Other reasons include: non-use for personal convenience, waived livestock numbers, cancellation of partial and total permitted use because

of permit violations. The Allowable Variance for this Item was exceeded by sixteen percent, but no change to the Forest Plan is required at this time.



^{*} Forest Plan Annual Output Objective (Forest Plan, page III-7) = ------

Monitoring Item 28: Forage Utilization

This Monitoring Item requires examining 20 percent of the range allotments on the Forest annually. Measurements are normally made in areas of heaviest use. Utilization levels must not exceed 10 percent of the allowable use guides for the grazing systems and range types shown in the Forest Plan (Chapter III, pages III-37 to 41). The results of monitoring forage utilization during 2002 are shown below.

Total allotments on the Medicine Bow NF	282
Allotments monitored	158
Percent of total allotments monitored	56

NOTE: The total number of allotments includes only those with grazing permits and allotments that are currently vacant. It does not include special use pastures or other use areas.

Although the Forest Plan requirement is to monitor 20 percent of the range allotments annually, 56 percent were surveyed during 2002. This level of accomplishement is exceptional considering the

higher National workload priority to complete the inventory and assessment of all rangeland improvements, and to enter all information into a new database.

Of greater significance is the fact that the continued severe drought required rangeland management specialists to be in the field more often to monitor rapidly changing conditions, and work with ranchers to maintain management system flexibility and, in some cases, to remove livestock earlier than normal. The coordination and cooperation of that monitoring effort required a lot of time on the ground to assure that Forest Plan Standards were being met on as many acres as possible. The level of monitoring varied from visual observations and estimates to transect surveys. Due to the drought, the most important priority was to check the field conditions on as many acres as possible to assure proper management results at the end of the grazing season.

Ranger District	Total Allotments on	Number Allotments	Allotments	Not
	the District	Monitored FY 2002	Meeting Plan	
Brush	35	35	0	
Creek/Hayden				
Laramie	16	16	0	
Douglas	231	107	0	
Forest Total	282	158	0	

The data reveals that all 158 allotments that were monitored met the Forest Plan requirements for utilization, which shows a continuing trend of improvement from previous years, even with the severe drought conditions. An analysis of the data for these allotments indicates that most of the upland areas were utilized equal to or less than the Standard stated in the Forest Plan. Several Districts required removal of livestock when proper use was reached in the riparian areas. The data suggests that improved management (better distribution, salting, water development) are resulting in proper utilization of riparian areas. The Forest Plan Standards and Guidelines for utilization need to be reviewed during the Revision process to determine if they are still appropriate. No changes are required at this time.

Monitoring Item 29: Range Condition and Trend

This Monitoring Item requires that 10 percent of the range allotments on the Forest be examined on an annual basis to determine the trend in range condition. The objective is to identify the condition trend in relation to the Desired Future Condition or Desired Plant Community. The techniques for monitoring are described in the Range Ecosystem Analysis Guide and involve the use of benchmarks. Benchmarks are small areas where long-term trend studies are established and maintained so that the manager can assess the resource impacts due to various activities. They are used as reference points that are sensitive to management changes, and may consist of permanent transects, paced-transects, or range-trend sampling by photographs. Benchmarks are placed in primary range areas, or those areas which produce or are capable of producing desirable forage, and are predicted to improve as a result of proper management. The table below shows the results of monitoring range condition trend during FY 2001.

Total allotments on the Medicine Bow NF	282
Allotments where trend was measured	38
Percent of total allotments monitored	13
Number of allotments with declining trend	0

The Ranger Districts exceeded the requirement for monitoring 10 percent of the range allotments for condition and trend. Although range personnel focused on Monitoring Item 28 because of the concern about drought conditions, none of the measured allotments were in a declining trend. This meets the Allowable Variance for this item, and also the goal of avoiding excessive forage use on some allotments.

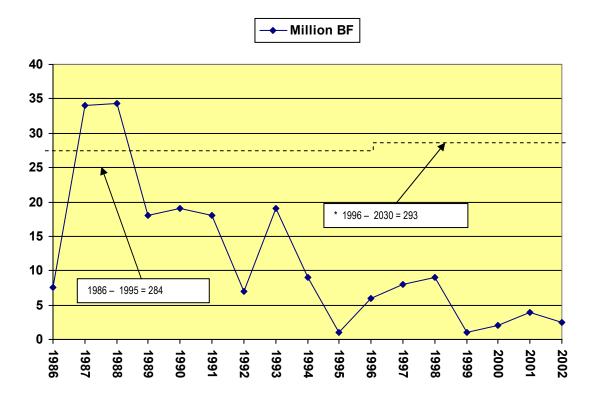
New methods have been developed to represent vegetation management, because it often takes decades to measure any appreciable change in range condition. A range examiner expected to interpret range trend must be highly trained and able to examine and compare years of previously collected data. Annual fluctuations in weather conditions also complicate determining any trend on an annual basis. Trend studies conducted every 5 to 10 years would be sufficient to monitor changes in range condition. These studies should focus on allotments suspected of having declining range conditions, and where improved management has been initiated to verify that the range condition is improving. This subject may be addressed in the Forest Plan Revision process, however no change is presently required.

Monitoring Item 30: Allowable Sale Quantity (ASQ)

The goal for this item is that the total amount of timber sold must be within the Allowable Variance for a ten-year period. The variance for a single year, however, may vary considerably because the amount of timber that is sold can be adjusted during successive years. The Allowable Variance for this item is that the amount of timber sold cannot exceed, or must not deviate more than 5 percent under 293.0 MMBF for the ten-year period 1996 – 2005 (Forest Plan, page IV-46). The total amount of chargeable volume that was sold during the first planning period was 166.1 MMBF, which is 58 percent of the total output predicted in the Forest Plan (page II-12, page III-8).

Fiscal Year 1996 initiated the second ten-year period of implementing the Plan, and the predicted output increased to 293.0 MMBF for the period 1996 – 2005 (page III-8). The amount of timber sold during Fiscal Year 2002 was 2.5 MMBF, which did not achieve the Annual Allowable Sale Quantity stated in the Forest Plan. Subsequently, the total amount of timber sold from 1996 to 2002 is currently at 27.0 MMBF, or 91 percent less than what was predicted in the Plan. Both the Allowable Sale Quantity and the Long-Term Sustained-Yield will be examined during the Forest Plan Revision process to determine if any change is needed. No immediate adjustments are necessary, however.

Allowable Sale Quantity (ASQ)



^{*} Forest Plan Annual Output Objective (Forest Plan, page III-7) = ------

Monitoring Item 31: Restocking of Harvested Areas

The RMRIS database for each Ranger District was used to determine how many acres were harvested during 1996. The total amount of area treated for this item includes the clearcut, seed-tree, removal, and selection harvest methods. The District databases were then used to determine how many acres were surveyed during 2002 and disclose how many acres were certified as satisfactorily restocked, as required by the NFMA (36 CFR 219.27(c)(3)). The table below summarizes the information obtained from the RMRIS databases.

Reforestation Survey Data:	Acres Harvested During 1997	Total Acres Surveyed		Acres Not Adequately Stocked
Forest Total:	107	107	107	0

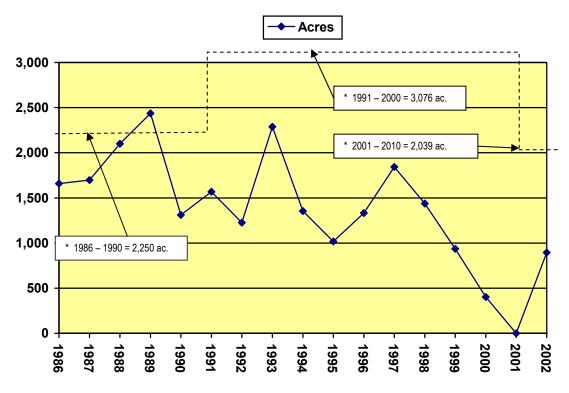
Final-harvesting occurred on 107 acres during 1997, thereby requiring a fifth-year survey during 2002 to determine stocking levels. All 107 acres were adequately stocked, which meets the Allowable Variance.

Forest Plan monitoring involves all aspects of reviewing a resource program, such as reforestation. In this case, reviewing both the field conditions and the computer data needs to be performed to ensure meeting the Allowable Variance (95 %). No change to the Forest Plan is required at this time.

Monitoring Item 32: Timber Stand Improvement

Timber Stand Improvement (TSI) includes thinning lodgepole pine stands before they reach age 30, in order to achieve stocking control and promote higher growth rates. The Forest goal for TSI during 2002 was 2,039 acres, however, 894 acres were treated. This is 44 percent of the amount predicted in the Forest Plan and a slight decrease from the previous year. The reduction is due to a new requirement to provide adequate habitat for lynx. District silviculturalists estimate that approximately 80 percent of thinning projects have been deferred until a determination can be made as to the impact of these projects on the lynx populations.





* Forest Plan Annual Output Objective (Forest Plan, page III-8 = ------

The annual amount of TSI performed on the Forest was an important factor that was used to help determine the Long-Term Sustained-Yield (LTSY) Capacity when the Forest Plan was developed. More emphasis needs to be placed on accomplishing TSI work on the Forest.

Under the premise of the original Forest Plan, planning and budgeting for Timber Stand Improvement should be made a high priority or it may affect the amount of timber available in the future. Receiving less than the projected budget for timber related activities, however, makes it difficult to program adequate TSI treatments under the current Forest Plan. In addition, the application of guidelines to

protect potential habitat for lynx often makes TSI projects difficult or impossible to execute. This problem is related to implementation rather than the Plan itself, therefore, no changes are currently needed. The intent and ouput objectives for this item need to be reanalyzed during Forest Plan revision.

Monitoring Item 33: Clearcut Unit Size

During 2002 the Forest implemented 11 clearcut units for a total of 125 acres. The smallest clearcut unit was two acres and the largest unit was 32 acres. The majority of the units were about 11 acres or less in size. The result of monitoring indicates that all the clearcuts on the Forest were within the Allowable Variance, or less than 40 acres, as required by the NFMA regulations (36 CFR, Part 219, Section 219.27(d)(2)(ii)) and Chapter III of the Forest Plan (page III-46, General Direction 5). No adjustment to the Plan is needed.

Monitoring Item 34: Created Openings

During 2002, all proposed vegetation treatments that would create openings were reviewed for compliance with Management Prescription 07E, General Direction 1066MB, and Standard and Guideline 6014 and 6316 in Chapter III of the Forest Plan (pages III-193 to 196). All openings created during 2002 met this management direction, and no change to the Forest Plan is necessary at this time.

Monitoring Item 35: Lands not Suited for Timber Production

This item is monitored and reported on an annual basis, as required in Chapter IV of the Forest Plan (page IV-51). This also meets the intent of the regulation at 36 CFR 219.27(c)(1), "No timber harvesting shall occur on lands classified as not suited for timber production pursuant to Section 219.14 except for salvage sales necessary to protect other multiple-use values or activities that meet other objectives on such lands if the forest plan establishes that such actions are appropriate."

No timber was harvested from lands classified as unsuitable for timber production during 2002. All the timber harvest activities were in compliance with Chapter III of the Forest Plan and the direction stated above. No changes to the Plan are deemed necessary at this time.

Monitoring Item 36: Water Yield

The Forest annually estimates the amount of water yield that occurs as a result of timber harvest and other vegetation treatments. Water yield coefficients for different vegetation types were developed for the Forest Plan revision effort, and were used to estimate water yield due to vegetative manipulation. The number of acres harvested and method of harvest (e.g. clearcut) were derived from each Ranger District RMRIS database. The amount of water yield as a result of 2002 timber harvest activities on 217 acres of the Forest was estimated to be 140 acre-feet. Water yield from approximately 500 acres of prescribed fire are expected to be minor due to the limited amount of precipitation and dry soil conditions in the sagebrush vegetation where the burns occurred. The Hensel, Reese, and Bear Mountain South wildfires on the Forest were estimated to produce an average water yield increase of 6,140 acre-feet. These values represent an average water yield for the period immediately following

vegetation manipulation and do not include any water yield due to vegetation management activities prior to 2002.

Compared to the estimated baseline water yield of 1,017,000 acre-feet produced from the Forest each year, the water yield for a single year due to vegetative treatment is normally less than one percent of the runoff from the Forest. The large wildfires that occurred on the Forest during 2002 significantly altered more vegetation than timber harvest and therefore, had the greatest effect on water yield.

The issue of timber harvest will be addressed during the Forest Plan Revision process, and will include a discussion of the relationship of water yield to the level of harvest during future years. The need for this monitoring item, and for 9B Management Areas (emphasis on increased water yield through vegetation management) is being evaluated during the Forest Plan Revision process. No amendments to the Forest Plan are necessary at this time.

Monitoring Item 37: Sediment Threshold Limits

Sediment yield may be altered as a result of water yield increases, or due to ground disturbing activities that cause erosion. Sediment impacts due to management activities were evaluated for each project that was implemented on the Forest during Fiscal Year 2002. It was determined that no project was likely to produce levels of sedimentation that would preclude beneficial uses of water. Ground disturbing activities (e.g. road construction) are believed to have a greater effect on sediment yields than increases in water yield. Changes in average annual sediment yield due to ground disturbing activities are difficult to predict and measure, therefore, the effects of increased sedimentation are best addressed by using Best Mangement Practices (BMPs) (see Monitoring Item 39). Monitoring the amount of sediment yield increase for this Item may need to be adjusted or eliminated for the following reasons:

- * The hydrologic sediment model (HYSED) prescribed in the Forest Plan only accounts for sediment yield due to water yield increases, and not surface erosion from ground disturbance.
- * Other hydrologic models predict surface erosion (with high uncertainty for sediment yield predictions) from management activities, but are not addressed in the Forest Plan.
- * Threshold limits (per HYSED modeling) for sediment yields have not been sufficiently validated during 17 years of Forest Plan implementation.
- * Monitoring soil erosion and the use of BMPs are more effective for protecting resources from sedimentation. This topic is addressed in Monitoring Item 39.

Standards and Guidelines stated in Chapter III of the Forest Plan were intended to prevent adverse effects from increased sediment yield. Sediment levels and channel stability in Billie Creek are still believed to be outside the limits prescribed in the Forest Plan (see Annual Monitoring and Evaluation Report for Fiscal Year 1999) that resulted from the breach of an irrigation diversion ditch. Restoration of a gully below the diversion ditch was accomplished in 2001, which should limit additional input of sediment to Billie Creek at this site. Stream conditions are expected to take years to recover. The Forest is working with the Department of Environmental Quality to determine if Billie Creek may exceed narrative water quality standards for aquatic habitat and sediment. No amendments to the Forest Plan are necessary at this time.

Monitoring Item 38: Water Quality

The Forest Service designs, implements, and monitors Best Management Practices (BMPs) as the primary means to protect water quality from nonpoint sources of pollution. Water quality monitoring is necessary to determine the effectiveness of BMPs and ensure compliance with State water quality standards. Water quality monitoring was conducted on three types of projects during 2002; a grazing allotment, a bridge replacement project, and a recreational gold dredging operation.

One water quality violation was recorded on North Branch Crow Creek during 2002. A private party and the Wyoming Department of Environmental Quality (WYDEQ) sampled bacteria levels in South Lodgepole Creek, North Branch Crow Creek, South Branch Crow Creek, and Middle Fork Crow Creek. WYDEQ determined that fecal coliform levels did not meet water quality standards at the sampling point on North Branch Crow Creek during October of 2002. WYDEQ indicated that the most likely source of the bacteria was from livestock fecal matter upstream of the sample point on North Branch Crow Creek (livestock had left the allotment approximately one month before samples were taken). Due to forage conditions, the Forest Service had shortened the normal grazing season in this area, but riparian grazing utilization standards were still not met in the vicinity of the sampling point. Initial sampling on South Lodgepole Creek did not indicate elevated bacteria levels, therefore, no additional sampling was warranted. Water quality sampling indicated that fecal coliform standards were met in South Branch Crow Creek and Middle Fork Crow Creek. Increased monitoring of riparian utilization along North Branch Crow Creek and additional water quality sampling is planned for 2003 to determine the persistence and extent of the bacteria contamination.

Forest Service personnel sampled suspended sediment levels above and below a bridge reconstruction site on South Fork Big Creek. Based on suspended sediment monitoring, it was estimated that numeric water quality criteria for turbidity was probably higher than acceptable limits for a short interval. WYDEQ recognizes some short-term, construction-related turbidity levels above the numeric standard are unavoidable and can be acceptable if no loss of beneficial use occurs. WYDEQ has a process to review and authorize temporary increases in turbidity if certain conditions are met, but authorization for a temporary turbidity increase was not obtained for this project. Monitoring of this project suggests that authorization for temporary turbidity increases above numeric standards may be necessary for a variety of construction activities in perennial streams on National Forest System lands. The Forest plans to sample turbidity, in addition to suspended sediment, for future projects and will evaluate the need for authorization for temporary turbidity levels above numeric standards on future projects.

Forest Service personnel also sampled suspended sediment levels above and below a recreational dredging operation on Douglas Creek. Based on this monitoring, it was assumed that the operation sampled probably met numeric water quality criteria for turbidity. Monitoring also indicated that the WYDEQ "Operational Guidelines for Recreational Placer Gold Panning, Dredging and Sluicing in Wyoming," were met for this project. However, water quality samples were not taken during an operation that did not meet several of the WYDEQ Operational Guidelines. Increased emphasis will be placed on ensuring that operators meet the WYDEQ guidelines, and also sample water quality to determine if the operations that follow the guidelines meet State water quality standards.

Forest personnel will continue to analyze each proposed project and suggest Best Management Practices to protect water quality. Soil and water mitigation measures will be monitored during and after implementation to determine the effectiveness for protecting water quality (see Monitoring Item 39). Adjustments are underway or planned to improve the implementation and effectiveness of BMPs for the

projects or programs where water quality violations were documented or expected. No amendments to the Forest Plan are necessary at this time.

Monitoring Item 39: Soil Erosion

Forest staff specialists visually inspected the implementation and effectiveness of Best Management Practices on a variety of projects in 2002, including recreational dredging operations, reconstruction of a bridge, irrigation diversion ditches, and timber sales for erosion control effectiveness.

The majority of BMPs evaluated for these projects were implemented and effective. Several measures were identified to improve the implementation and effectiveness of BMPs:

- The timing of installation and removal of erosion control measures needs to be clearly stated in
 project objectives and monitored during project implementation. Monitoring revealed some
 situations where ground disturbing activities occurred before erosion control measures were in
 place, and also situations where erosion control measures were removed before long-term
 erosion control was effective.
- Erosion control plans, typically required on contracts issued by the Forest Service, could be more specific related to timing, location, proper installation procedures, and maintenance of erosion control during construction activities.
- Monitor turbidity, in addition to suspended sediment, in order to improve our ability to make determinations related to State water quality standards.
- One or two of the recreational dredge operations that were reviewed may have violated several operating guidelines. Increased monitoring and use of the WYDEQ, "Operational Guidelines for Recreational Placer Gold Panning, Dredging and Sluicing in Wyoming" is needed on the Forest.
- Maintenance needs were identified on all water diversion ditches inventoried during 2002. Development and distribution of maintenance and operations guidelines, as well as implementing more frequent inspections, is recommended for water use facilities on the Forest.

In general, the Forest is meeting the requirements for soil protection, as stated in the Forest Plan. The Forest has a process in place to defining BMPs for projects, monitoring to ensure BMPs are applied and effective, mitigating unforseen problems, and adjusting practices for future activities. No amendments to the Forest Plan are necessary at this time.

Monitoring Item 40: Soil and Water Resource Improvements

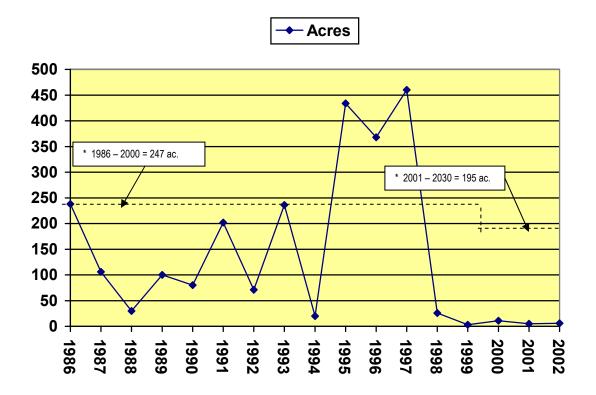
The Forest accomplished 6 acres of soil or watershed improvements during 2002, which is only three percent of the annual Forest Plan objective of 195 acres. In addition, stream habitat improvement and restoration occurred at two sites on the Forest. The following projects were accomplished during 2002:

^{*}National Forest System Road 103; soil and water improvements.

^{*}National Forest System Road 498 cutoffs; soil and water improvements.

^{*}South Fork Big Creek; streambank stabilization.

Soil and Water Resource Improvement



* Forest Plan Annual Output Objective (Forest Plan, page III-9) = ------

The low level of accomplishment continues to be due to the method of allocating funds to individual Forests, which resulted in the Forest receiving significantly less funding for this program than previous years. Implementation of soil and watershed improvement projects was also limited due to the allocation of personnel and funds to assist with fighting wildfires. The actual number of projects that benefit watershed conditions is likely somewhat higher than the 6 acres recorded, but tracking is problematic due to the variety of resource program areas that implement the projects. The budget trend is expected to continue, and will be part of the Forest Plan Revision. No change is currently needed.

Monitoring Item 41: Forest Road Development

The stated objectives for this item are listed on page III-10 of the Forest Plan. The outputs from the Forest Road Development Program during 2002 are shown on the Evaluation Table of this report. The two main reasons for not meeting the stated goals for this item include the reduced timber program and the current National effort to develop the most cost-effective transportation system considering both construction and maintenance funding.

Forest road development accomplishments during Fiscal Year 2002 consisted of 2.1 miles of new road construction for minerals access. No miles of construction were reported for general use or timber sales.

A total of 0.5 miles of system roads were decommissioned during Fiscal Year 2002 for soil and water rehabilitation purposes. An additional 17.7 miles of unclassified roads were also decommissioned.

The Forest has completed a forestwide roads analysis that will result in recommendations for a final transportation system that balances the needs of resource management and the availability of personnel and funding. Site-specific proposals for any new road construction or closures will be analyzed and documented in compliance with the NEPA process, including public involvement. This topic will also be discussed during the Forest Plan Revision Process, but no change to the Plan is currently needed.

Monitoring Item 42: Trail Construction and Reconstruction

The Laramie District completed construction of one bridge at the Green Rock Picnic Area and one bridge on the cross-country ski trail system at the Snowy Range Ski Area. Trail crews also completed work to mitigate major drainage problems on the Aspen Loop Trail at Pole Mountain.

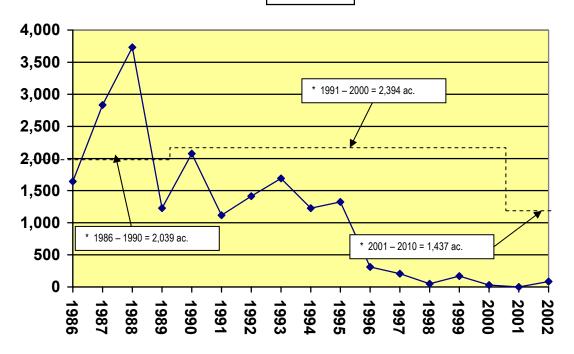
Maintenance was done on 58 percent of the Brush Creek/Hayden Districts trails, including winter use trails. Bulletin boards were installed at 20 trailheads; 12 at wilderness trailheads and 8 at non-wilderness trailheads. Even with limited funds, wilderness trails and trailheads are generally in good condition. New bulletin boards, with registration boxes, were installed at trailheads to provide information for wilderness users. No changes to the Forest Plan are deemed necessary at this time.

Monitoring Item 43: Fuel Treatment

During 2002, the Districts treated 84 acres of activity fuels that were left as a direct result of various vegetation management activities. The objective for this item is 1,437 acres (Forest Plan p. III-10), therefore, only six percent of the goal was accomplished. This item depends on the amount of timber harvest, and does not reflect prescribed burning projects that are related to the National Fire Plan. This problem is not related to the Forest Plan, therefore, no change to the Plan is currently needed.

Fuels Treatment





^{*} Forest Plan Annual Output Objective (Forest Plan, page III-10) = ------

Monitoring Item 44: Forest Insects and Diseases

This monitoring item is partially dependent upon aerial surveys and ground investigations by Regional Office personnel, including entomologists. An aerial survey was conducted on the Forest during the 2002 field season. On-the-ground investigations are also conducted annually on the Douglas, Brush Creek/Hayden, and Laramie Districts, in association with routine field activities.

<u>Pest-Related Tree Losses on the Medicine Bow National Forest in 2002:</u>

Aerial surveys were conducted on the Forest during 2002 to provide a broad indication of tree mortality resulting from forest pests. The results of the survey are presented below.

Table 1. Pest-related tree losses for the Medicine Bow National Forest in 2002.

Pest	Acres Affected	Estimated Trees Killed
Mountain Pine Beetle	7,307	16,953
Spruce Beetle	795	1,880
Subalpine Fir Decline	26,333	51,137
Limber Pine Decline	3,108	1,053
Douglas-fir Beetle	101	160

Pest-Related Tree Losses on the Sierra Madre and Snowy Range in 2002:

Increasing numbers of trees killed by mountain pine beetles were noted in the lodgepole pine forests, particularly along the eastern slopes of the Sierra Madre Range. In addition, mortality also continued to increase along the western slope of the Snowy Range.

Mortality caused by spruce beetles occurred at increased levels on the Sierra Madre Range during 2002. Tree losses due to spruce beetles on the adjacent Routt National Forest increased to epidemic levels in 2002, as the infestation continues to expand following the Routt Divide Blowdown of 1997. Considering the distribution of spruce beetle infestations in the Sierra Madre Range, Forest Health Management (FHM) believes that this area will lose most of the mature spruce over the next ten years if the current outbreaks continue. The number of infested trees also continued to increase in the Snowy Range, particularly at the Silver Lake campground. If beetle numbers continue to increase during the next several years, there is a likelihood that an epidemic will develop within the next ten years.

Limber pine losses are increasing along the eastern slope of the Snowy Range. These losses are probably due to mountain pine beetle infestation, although FHM has not ground-checked these areas yet to confirm the causal agent.

Subalpine fir continued to decline on the Medicine Bow National Forest in 2002. This problem is related to three different organisms; the western balsam bark beetle (<u>Dryocoetes confuses</u>), a pathogenic fungus of subalpine fir (<u>Ceratocystis dryocoetidis</u>), which is vectored by the beetle, and the root decay pathogen <u>Armillaria ostoyae</u>. All three organisms contribute to subalpine fir decline, a complex problem that has increased on the Forest during the past seven years.

Pest-Related Tree Losses on the Sherman Mountains in 2002:

Pest-related tree losses on the Sherman Mountains were probably the result of mountain pine beetles, but FHM has not ground-checked the killed trees to confirm the causal agent. Increased impact from white pine blister rust on limber pine is also evident across the Sherman Mountains, and is spreading throughout southeastern Wyoming.

Pest-Related Tree Losses on the Laramie Mountains in 2002:

Pest-related tree losses on the Laramie Mountains were caused by a mountain pine beetle infestation in 2002. Tree mortality has been at low levels in the Laramie Mountains, but increased during 2002. White pine blister rust is also present on some limber pine in the Laramie Mountains, and is expected to spread in that vicinity.

Pest Suppression Accomplishments on the Medicine Bow National Forest in 2002:

Pest suppression treatments on the Forest during 2002 were associated with, both spruce beetle and mountain pine beetle infestations at the Silver Lake Campground, Lost Creek Campground, Lost Creek Timber Sale, North Twin Lake area, and the Road 103 Blowdown area. A total of 128 infested trees were felled and the bark was mechanically removed to kill developing larva.

During August, the Silver Lake Campground and adjacent forest was surveyed for beetle-infested trees by the FHM and district staff. A total of 55 trees were identified and flagged. A later ground survey by District staff identified and flagged 16 additional beetle-infested trees.

On September 24-25, approximately 259 trees in the Silver Lake Campground were treated with insecticide (Sevin) in an effort to protect them from mortality during 2003. The insecticide was applied with a ground sprayer and was able to reach up to forty feet above the ground.

Another issue of concern is the occurrence of root disease and hazard-tree problems in campgrounds, other developed sites, and administrative sites. Serious injury and property damage can occur without warning when hazardous trees or limbs fall to the ground. An intensive and continuous evaluation of developed sites is needed to ensure identification and removal of hazard trees in these areas. The Forest should retain the ability to conduct timber sales in developed areas for the purposes of hazard tree removal and overall vegetation management. This needs to be addressed in the Revised Forest Plan. Monitoring the incidence of insects and diseases on the Forest will continue. No change to the Forest Plan is presently needed in relation to this Monitoring Item.

Monitoring Item 45: Land Exchanges

Monitoring for this Item consists of reporting the number of acres that are exchanged with other land owners near or adjacent to the Forest. Land exchanges may be proposed by the Forest Service or by a private party, business, or organization, and occur when a proposal is advantageous to both parties and meet all legal requirements. No land exchanges were consummated during 2002. The Forest Plan prediction of completing 160 acres annually (Table III-1, page III-10) is an average goal that was expected to vary greatly from year to year. No changes to the Forest Plan are needed at this time.

Monitoring Item 46: Right-of-Way Acquisition

Monitoring for this item consists of reporting the actual number of rights-of-ways that are acquired on an annual basis. During Fiscal Year 2002 the Forest reported the acquisition of one right-of-way, which,

similar to the previous year, is significantly less than the 25 cases that were predicted in the Forest Plan. No changes to the Plan are needed at this time.

Monitoring Item 47: Landline Location

During Fiscal Year 2002, a total of 15 miles of landlines (property boundaries) were located and marked on the Forest, which is 60 percent of the annual objective for this item. The reduced output was due to less than normal funding and difficult surveys, therefore, no change to the Forest Plan is recommended.

Monitoring Item 48: Compliance with Terms of Land Use Authorizations and Consistency with the Forest Plan

Monitoring this Item includes reviewing initial or renewal applications for special use permits to ensure that they are consistent with the Forest Plan. The application may need to be revised, or it may be denied if it is not consistent with the requirements of the Plan. Monitoring also includes inspection of existing uses for compliance with the terms of the authorization.

During Fiscal Year 2002, the Ranger Districts inspected a total of 159 uses, or about 26 percent of the total permitted uses on the Forest. The inspections verified that the uses were either in compliance, or the permittees were advised as to the work necessary to achieve compliance. No changes to the Forest Plan are needed at this time.

Monitoring Item 49: Compliance with the Terms of Operating Plans (Minerals)

Monitoring this item consists of reviewing operating plans for minerals extraction to ensure compliance with the requirements of the Forest Plan. This includes inspecting the work performed on the ground, and comparing the activities to the stipulations of the Operating Plan. During Fiscal Year 2002, a total of 460 mineral operations were examined, and all were in compliance with the operating plans. The majority of these examinations took place on the Thunder Basin National Grassland. No change to the Forest Plan is currently needed.

Monitoring Item 50: Demand for Live Green Sawtimber

During 2002, a total of 8.2 MMBF of live-green sawtimber under contract was harvested from the Forest (this does not include personal use permits). On October 1, 2002, approximately 10.99 MMBF were still under contract, which is 1.3 years of volume scheduled for harvest based on the the 2002 level. This monitoring item was created by Amendment Number 5 to the Forest Plan, which requires adjustments to the timber harvest schedule if the volume under contract falls below a specificed level. Although the Allowable Variance for this item was exceeded, the entire timber program will be reanalyzed during Forest Plan Revision. No changes to the Forest Plan are needed at this time.

X. NEED TO IMPROVE MONITORING OR IMPLEMENTATION



The first year of Monitoring the Forest Plan occurred during 1986. It was determined that the management Standards and Guidelines in the Forest Plan were being followed, and most of the Average Annual Projected Outputs listed on Table III-1 were being achieved. No changes to the Plan were recommended by the ID Team at that time.

Various problems with some of the methods used for monitoring were discovered over time, however. The major concern was the inconsistency of data collection and reporting among Ranger Districts. The other concern was that some items were not suitable for Monitoring, or the information collected did not achieve the desired results. These Monitoring Items were adjusted by Amendment Number 4 to the Forest Plan, approved July 14, 1987. This amendment improved Chapter IV of the Plan to make the direction more clear and easier to implement.

Fiscal Year 2002 was the seventeenth year of Monitoring how well the Forest Plan was being implemented. The Forest ID Team has identified a few concerns that need to be addressed as a result of the annual monitoring effort. Most of the items can be corrected by improving Monitoring procedures or implementation methods. In a few cases, the problem may need to be corrected as an outcome of additional scientific research.

Section IX,(E) of this report contains a complete description of each of the 50 Items that were monitored during 2002, and the results of that monitoring. The following recommendations were made in order to correct some of the deficiencies that were identified by the Responsible Person for each Item. All the recommended changes consist of adjusting implementation or monitoring procedures, and will not directly affect the Forest Plan. The actual accomplishment of these recommendations will depend upon the availability of personnel and funding during Fiscal Year 2003 to perform the necessary analysis, documentation, and coordination of the proposed changes.

Monitoring Item 1: Off-Road Vehicle Damage

The buck and pole fence at White Rock Canyon on the Brush Creek/Hayden District still needs to be repaired to prevent off-road vehicles from damaging the area behind the fence. This work will be coordinated between the Ranger District and the Forest Recreation Staff Specialist.

Monitoring Item 11: Compliance with Cultural Resource Regulations

Project leaders and contracting officers need to maintain their efforts to keep the Forest Cultural Resource Staff informed of modifications to ongoing projects.

Monitoring Item 16: Old Growth Retention

Each Ranger District needs to continue the task of designating an adequate number of acres of old growth within 4B Management Areas in order to comply with this Monitoring Item. This needs to be accomplished during site-specific project planning, and will be coordinated between the District Rangers and the Forest Timber Staff Specialist.

Monitoring Items 18 - 22: Winter Range Carrying Capacity, Snag Retention, Threatened and Endangered Species, Wildlife and Fish Habitat Improvement, and Elk Habitat Effectiveness

Because of the importance of these items, Ranger District Wildlife Biologists and Supervisor's Office Staff Officers need to continue to focus on monitoring these features. The summary reports for these items in Section IX,(E) of this document stress the need to continue careful monitoring into the future.

Monitoring Item 39: Soil Erosion

The timing of installation and removal of erosion control measures needs to be clearly and specifically stated in project objectives and monitored during project implementation. Monitoring turbidity needs to be stressed in making State water quality standard determinations. Recreational placer dredging and diversion ditch operations are two areas deserving of careful oversight. Forest engineers, District minerals/special use specialists and District Rangers need to be attuned to these needs.

RESEARCH NEEDS

Monitoring efforts during 2002 did not disclose immediate needs for research efforts to support the implementation and monitoring of the Medicine Bow National Forest's Plan. However, the National Forest Management Act (NFMA) requires that the Forest Plan revision process include a study of indicated research needs forestwide. Plan revision is ongoing at this time; a final revised Forest Plan and Record of Decision will be produced in December of 2003.

XI. NEED TO CHANGE, REVISE, OR AMEND THE FOREST PLAN

The results of monitoring implementation of the Medicine Bow National Forest Land and Resource Management Plan during Fiscal Year 2002 have been analyzed by the Forest Interdisciplinary Team and Staff Specialists. Based on this review, it was determined that the intent of the Forest Plan is being met by most resource programs during implementation of site-specific project activities.

Implementation and monitoring of project activities needs to be as effective as possible, in order to protect the resources and resource uses of the land. The results of monitoring and evaluating implementation of the Forest Plan during 2002 only revealed some minor deficiencies in relation to several of the Monitoring Items. Subsequently, recommendations have been made to improve Forest Plan monitoring, or implementation of some project activities, which are described in Section X of this report. Any major changes to the Forest Plan will require a comprehensive analysis and evaluation, and will be addressed during the Forest Plan Revision Process (refer to Section VI of this report).

XII. REVIEW OF PREVIOUS YEAR RECOMMENDATIONS

The following list of recommendations to improve monitoring or implementation was developed by the ID Team and recorded in the 2001 Annual Monitoring Report (pages 48-50). Under each recommendation is a description of what was accomplished for that item during FY 2002.

Monitoring Item 1: Off-Road Vehicle Damage

The buck and pole fence at White Rock Canyon on the Brush Creek/Hayden District still needs to be repaired to prevent off-road vehicles from damaging the area behind the fence. This work will be coordinated between the Ranger District and the Forest Recreation Staff Specialist.

Accomplishment: This item was not accomplished.

Monitoring Item 11: Compliance with Cultural Resource Regulations

Each Ranger District needs to ensure that all projects on the Forest are completed according to Section 106 of the Historic Preservation Act and the associated Forest Plan requirements during FY 2002. This work will be coordinated between the Line Officers responsible for both NEPA and Section 106 compliance, and the Forest Cultural Resource Staff Specialist.

Accomplishment: This item was accomplished by each Ranger District during FY 2002.

Monitoring Item 16: Old Growth Retention

Each Ranger District needs to continue the task of designating an adequate number of acres of old growth within 4B Management Areas in order to comply with this Monitoring Item. This needs to be accomplished during site-specific project planning, and will be coordinated between the District Rangers and the Forest Timber Staff Specialist.

Accomplishment: This item was not accomplished. Continued efforts are encouraged.

Monitoring Item 18: Winter Range Carrying Capacity

Each Ranger District needs to monitor and report this Item during Fiscal Year 2002, as required in Chapter IV of the Forest Plan (page IV-34). This work will be coordinated between the Ranger Districts and the Forest Wildlife Biologist.

Accomplishment: This item was accomplished. Continued efforts are encouraged.

Monitoring Item 19: Snag Retention

Each Ranger District needs to monitor and report this Item during Fiscal Year 2002, as required in Chapter IV of the Forest Plan (page IV-35). This work will be coordinated between the Ranger Districts and the Forest Wildlife Biologist.

Accomplishment: This item was accomplished. Continued efforts are encouraged.

Monitoring Item 20: Threatened and Endangered Species

Each Ranger District needs to monitor and report this Item during Fiscal Year 2002, as required in Chapter IV of the Forest Plan (page IV-36). This work will be coordinated between the Ranger Districts and the Forest Wildlife Biologist.

Accomplishment: This item was accomplished. Continued efforts are encouraged.

Monitoring Item 21: Wildlife and Fish Habitat Improvement

Each Ranger District needs to monitor and report this Item during Fiscal Year 2002, as required in Chapter IV of the Forest Plan (page IV-37). This work will be coordinated between the Ranger Districts and the Forest Wildlife Biologist.

Accomplishment: This item was accomplished. Continued efforts are encouraged.

Monitoring Item 22: Elk Habitat Effectiveness

Each Ranger District needs to monitor and report this Item during fiscal year 2002, as required in Chapter IV of the Forest Plan (page IV-38). This work will be coordinated between the Ranger Districts and the Forest Wildlife Biologist.

Accomplishment: This item was accomplished. Continued efforts are encouraged.

Monitoring Item 38: Water Quality

Ditch integrity and recreational gold dredging needs to receive more inspection and oversight Forest-wide. Turbidity checks in stream reaches that could be impacted by ditch breaches need to be planned for and executed. Such inspections and turbidity readings need to be reported as part of this monitoring item in the 2002 monitoring report.

<u>Accomplishment</u>: This item was accomplished in cooperation with the Wyoming Department of Environmental Quality.

Monitoring Item 39: Soil Erosion

All Districts should select two or three low maintenance level roads, in addition to contemporary earth-disturbing activities, and evaluate the effectiveness of the erosion prevention features in preventing erosion. Reporting will be made on the Soil Monitoring Worksheet, Section IV-56 of the Medicine Bow Forest Plan.

Accomplishment: This item was accomplished.

<u>SUMMARY</u>: All but one of the changes recommended in Section X of the 2001 Evaluation Report were accomplished during 2002 (the White Rock Canyon closure fence). Special efforts will be made by the Forest NEPA and Monitoring Staff and the District Staff to insure that this item is accomplished prior to the next Monitoring Report. Proper implementation of these items is deemed necessary to, "protect, restore, or enhance the environment (40 CFR 1500.1(c))." The reasons for accomplishing or not accomplishing the recommended actions are discussed by the individual Forest Resource Staff Specialists in Section IX(E) of this Report. In general, the accomplishment of any recommended items in future years will depend upon overall Forest priorities and the availablity of personnel and funding to perform the required activities.

XIII. LIST OF PREPARERS

The Annual Monitoring Evaluation Report for Fiscal Year 2002 was compiled by the planning staff specialist of the Medicine Bow-Routt National Forests. The following list displays the name and resource program of the Forest Leadership Team, and also the Forest ID Team members that contributed the information and evaluation for the Monitoring Items.

NAME

FUNCTIONAL RESOURCE AREA

SELECTED MEMBERS OF THE FOREST LEADERSHIP TEAM

Mary H. Peterson	FOREST SUPERVISOR
Lynn Jackson	
Susan Kay	Director - Business Management Group
Mike Murphy	
Richard Rine	Director - Renewable Resources

FOREST STAFF SPECIALISTS

Becky Bean	. Accounting Technician
Greg Eaglin	. Fisheries Biologist
Tom Florich	. Lands - Special Uses
Ray George	. Recreation Program Manager
David Gloss	. Hydrologist
Paula Guenther-Gloss	. Fisheries Biologist
Jena Hickey	. Wildlife Biologist
Tommy John	. Soil Scientist
Barbara McKown	. Accounting
Bob Mountain	. Range Management
James Myers	. Forester, Timber
Karen Price	. Personnel
Mary Sanderson	. Recreation
Sue Struthers	. Archeologist
Carl Sumpter	. Land Surveyer
Jeff Tupala	. Landscape Architect
Ann-Marie Verde	. Transportation Planner
Kirk Wolff	. Hydrologist

CERTIFICATION

I have reviewed the Annual Evaluation Report for the Medicine Bow National Forest and Thunder Basin National Grassland that was prepared by the Forest Interdisciplinary Team for Fiscal Year 2002. I believe that the results of Monitoring and Evaluation, as documented in this Annual Report, meet the intent of both, Chapter IV of the Forest Plan, and current Regulations (36 CFR 219.12(k)).

The Forest ID Team and Leadership Team have not identified any significant changes in conditions or demands of the public that would change the goals, objectives, or outputs of the Forest Plan (36 CFR 219.10(g)) prior to completion of the scheduled Revision. Therefore, I have determined that an Amendment to correct any identified deficiencies of the Plan is not immediately necessary nor practical considering the ongoing Forest Plan Revision process.

I have also considered the recommendations made by the ID Team in Section X of this report. I concur that additional emphasis needs to be placed on the Forest Monitoring Program, in order to meet the intent of Chapter IV of the Forest Plan and the implementing the 1982 regulations of NFMA at 36 CFR, Part 219, Section 219.12(k).

In conclusion, I concur with the findings of the 2002 Annual Monitoring Evaluation Report for the Medicine Bow National Forest and Thunder Basin National Grassland. This is not an appealable decision, according to 36 CFR 215.7, "Decisions Subject to Appeal." Contact Steve Nielsen at the Medicine Bow-Routt National Forests, 2468 Jackson Street, Laramie, Wyoming, 82070, or call (307) 745-2404, if you have any specific concerns, questions, or comments about this report.

S/ Mary H. Peterson October 14, 2003
MARY H. PETERSON Date
Forest Supervisor

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